The interaction between the personal and the institutional dimensions of sixteen comprehensive secondary schools: An organizational and comparative analysis.

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THE INTERACTION BETWEEN THE PERSONAL AND THE INSTITUTIONAL DIMENSIONS OF SIXTEEN COMPREHENSIVE SECONDARY SCHOOLS: AN ORGANIZATIONAL AND COMPARATIVE ANALYSIS

submitted by John Adderley Bunday

for the degree of Ph.D.

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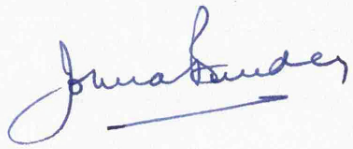

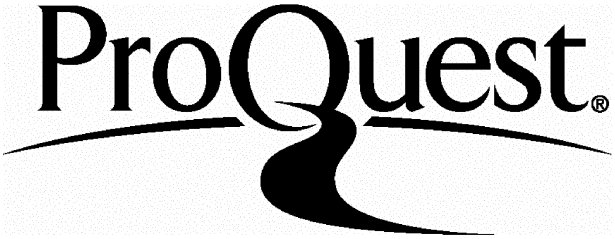

ABSTRACT

This investigation was conducted in eight English and eight Western Australian comprehensive secondary schools. The aim was to make an analysis of these randomly selected schools in terms of the interaction between institutional goals, structures and procedures on the one hand and staff responses on the other. The background includes a brief examination of the recent political and historical context of secondary education in the two countries, identification of school objectives and major policy areas.

The research, which is based on the major dimensions of organizational behaviour identified by Getzels and Guba, utilises two discrete methodologies.

The institutional (nomothetic) strand is examined by means of participant-observation and interviews. These show considerable differences between schools in organizational patterns, methods of decision making and the degree of staff involvement.

The personal (idiographic) strand is analysed by means of the questionnaire responses of 73.34% of the teachers in the sample. The results show significant differences between schools in terms of levels of personal needs satisfaction, professionalism and degree of involvement in decision making. A number of links between these variables and school and personal characteristics are identified.

Conclusions fuse the two sets of findings, show the vital role of leadership, demonstrate the advantages of a sub-school structure, examine the extent to which teachers participate in decision making, identify teachers who feel deprived in their

school situations and pinpoint two areas of comparative neglect within the schools. Areas for possible further research are specified.

Finally, fifteen recommendations to school and system level administrators are proposed. Among these, schools are exhorted to give added impetus to the areas of ethos and staff development and to provide avenues for involvement of those teachers identified as deprived. Systems are apprised of particular staff support needed and of the effects of different hierarchy establishments within schools.

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This work is dedicated to my wife, **Annette**, who inspired and encouraged me over many years. I acknowledge with affection her assistance with manuscripts, her support in times of stress and her effort with our three sons when, as they grew towards manhood, their father was so frequently "busy".

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CHAPTER 1

THE FIELD OF THE INVESTIGATION

INTRODUCTION

The comprehensive secondary school is a phenomenon of the mid twentieth century, its genesis found in the idealism of a post-war period which claimed equality of opportunity to be a desirable end. Changing social circumstances, in which secondary education became the recognised right of all, contributed to its development.

The emergence of the comprehensive school signalled the decline of specialised schools catering for specifically identified cross-sections of the community. In some countries, such as Australia, the transition to a system providing a general secondary education was accomplished easily and is effectively complete. In Britain, by contrast, the change, by no means fully accomplished, has been surrounded by controversy.

The term comprehensive implies complexity. By virtue of their diverse nature, their ambitious ideals and their ambivalent goals, schools which aim to be all embracing must end up as complicated entities. Those responsible for their administration are well aware of the entanglement of one aspect with another, of the labyrinth of conflicting demands.

This current study is intended to be an organizational analysis. During the same years that comprehensive schools have been in vogue, educational administration as a field of study in

its own right has emerged. The new discipline has provided the types of tools necessary to enable such an analysis to be made. A study of the literature bears this out: the school has been a fertile workshop for management research, particularly in North America. The literature also shows that emphasis has been on the parts rather than the whole.

It is the contention of this study that there is a pressing need for analysis of the secondary comprehensive school as a functioning unit. Whilst this holistic approach has not been commonly used, administrators, whether at school or system level, have need for a bird's-eye view. It is recognised that for effective research to be carried out a general overview will require the investigation of quite specific topics.

The decision to investigate the whole school setting was not taken lightly since limited areas of enquiry are usually considered more viable; they make a neatly controlled package and the conclusions are generally definitive. On the other hand, broadly based research is more in keeping with the requirements of the author and his employers who partly sponsored it. The author is a Western Australian high school principal who has often found specific conclusions to be difficult to apply in the school. There appear to be conflicting findings, confusing claims and counter claims. Indeed, the close study of educational administration over an extended period has sometimes seemed more of a handicap than a benefit. Such an observation serves to underline the basic difficulties inherent in investigation into aspects of human behaviour.

At the outset, it must be stressed that the school is

not a self-contained isolated entity. It exists within the community, interacts with it and responds to environmental demands. Many of the important decisions affecting schools are taken by outside agencies: authorities and departments, government legislation, community opinion and pressures, the social environment all help to mould the shape and function of formal education. Some external groups see schools as fulfilling a selection role and influence the programme so that it will be of greatest use to themselves. Universities demand and obtain control over sections of the curriculum; employer groups are vitally interested in educational standards and help decide the monitoring techniques. The school is seen as the servant of the public and accountable to it.

Despite the obvious monitoring influence of external factors, the school has both the autonomy and the responsibility to make some very important decisions for itself. Deciding how it will carry out the functions the community has assigned to it and organising available resources to the best advantage are seen as the prerogative of the school rather than the community. Schools influence decisions that will be made for them and evidence of this autonomy may be seen in their divergent nature: different solutions are found for the same problem and no two institutions are exactly the same.

A CONCEPTUAL FRAMEWORK FOR ANALYSIS

A review of organizational theory is provided in the second chapter of this thesis. It will be seen that two main strands of the administrative process are almost universally recognised as

dominant. These relate to the institution and its task on the one hand and the persons within the organization on the other. An organizational analysis of the school must embrace both these dimensions.

One convenient and well known representation of this concept is provided by Getzels and his associates. Administration is described as a social process within the context of a social system. The functioning of a social system, such as a school, is seen to be dependent upon the interaction between the institutional and personal dimensions of behaviour. A given act is the outcome of an "inextricable combination of role and personal factors" (Getzels, Lipham and Campbell, 1968:52,80).

This theoretical concept is represented by the paradigm of Getzels and Guba (1965). The model indicates both a separation and an interdependence of the nomothetic (institutional) and idiographic (personal) dimensions (Figure 1).

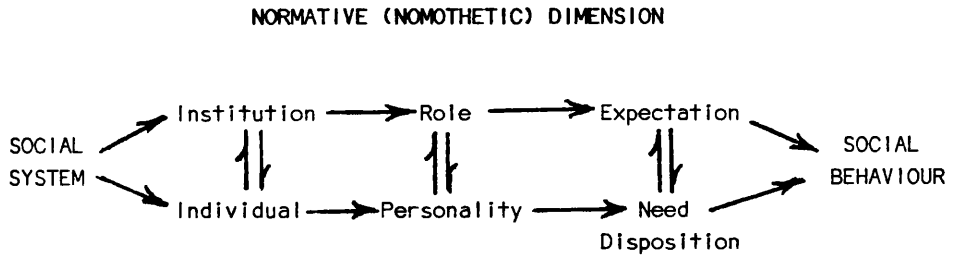

Figure 1: The Normative and Personal Dimensions of Social Behaviour (Getzels, Lipham and Campbell, 1963:80)

The use of a model such as this provides immediate

advantages. It enables the early identification of the elements of an organization. If each element is treated discretely it provides access to fundamental problems that an all-embracing investigation must address. Later it allows examination of the inter-relationships between the elements.

Before utilising these elements to identify general problems for this investigation, the critical features of the comprehensive secondary school, as they relate to the nomothetic and idiographic dimensions of the model, will be nominated.

(a) The Nomothetic Dimension

Institutions are characterised by structure, purpose and function. Structure relates to rules, co-ordination of the parts, deployment of staff and the utilisation of resources. Purpose is defined in terms of the aims and objectives. Function refers to organization procedures such as the way decisions are made. In examining the nomothetic construct of a school it will be necessary to include all of these aspects.

Structure is largely descriptive. One task of this study will be to describe the structure of the comprehensive school.

The purpose of a school is theoretical. The study must attempt to define what the school aims to do. In Chapter 3 of this presentation school aims are collated from various sources and summarised. By classifying these aims the policy areas of the school are identified.

The function of a school is partly descriptive, partly theoretical. The theoretical factors are analysed in terms of the policy making process, also outlined in Chapter 3. The study will attempt to describe how the school acts to achieve its ends.

(b) The Idiographic Dimension

The tasks of an institution are carried out by flesh and blood individuals, no two of whom are exactly alike. Individuals have unique personalities, motivations, abilities and social propensities.

Pupils are the most important individuals within the school but they do not carry out its tasks. They are the product of the school and they influence it but do not run it. Teachers outnumber all other personnel, carry out the main functions and are the logical subjects for an idiographic analysis.

This investigation must examine suitable individual characteristics of teachers within the comprehensive secondary school.

THE KINDS OF PROBLEMS TO BE INVESTIGATED

The first three identified elements of the Getzels-Guba framework constitute the nomothetic dimension. There is considerable concept overlap: it is not possible, for instance, to talk about the institution without also considering its role and expectation. A similar overlap occurs with the three elements of the idiographic dimension. The attempt here will be to nominate what appears to be the most pertinent problem related to each particular element.

Element 1: Institution

The structure of the organization would appear to be the central theme. It has already been claimed that the comprehensive secondary school is complex. Is such a statement justified?

Examinination of the framework of the organization leads to identification of the following problem:

How is the comprehensive secondary school organized?

A related question is also of interest

Are all such schools organized similarly?

Element 2: Role

The term may be used in two ways. One refers to the place and function of the individual in the organization, the second to the task that the organization itself undertakes. Problems related to individuals are examined as part of the idiographic dimension, so the second meaning will be employed. What is the school trying to achieve? This leads to the statement of the next problem:

What are the aims and objectives of the comprehensive secondary school?

Element 3: Expectations

Anticipated results may or may not be achieved. Actual outcomes are the result the organization uses to achieve its ends. This leads to two further problems:

How does the comprehensive secondary school operate?

and

What are its anticipated outcomes?

Element 4: Individual

The individual within the organization forms a relationship with his job. He has a particular role which he attempts to fulfil. How does he feel about it? Does it satisfy him? Such discussion

leads to identification of a further problem;

Is the teacher's role within the comprehensive secondary school satisfying?

Element 5: Personality

The individuality of the organizational member is a reality: each one is different. To what extent do personal characteristics influence the way the member behaves? How do individual idiosyncrasies affect attitude? Within the school, the problem may be summarised:

To what extent do personal characteristics affect the work of the comprehensive secondary school teacher?

Element 6: Needs Disposition

The individual does not work primarily for the sake of the institution. Regardless of the level of his commitment, he works to fulfil his own needs. Does the job provide him with the level of involvement he desires? In the school context this suggests the question

Is the comprehensive secondary school teacher's need to participate satisfied?

THE STUDY TO BE UNDERTAKEN

No attempt has been made to define the precise nature of this investigation. An indication of the scope of the study has been given and eight problems, indicative of the topic but not prescriptive for it, have been nominated.

The author has shown his own interest and involvement in the comprehensive secondary school. He has also stated his contention that more studies of the school as an organizational unit are both warranted and necessary.

In Chapter 4 a research project will be outlined. The design will be based on evidence from the review of the literature given in Chapter 2, a preliminary investigation of school aims, setting and procedures outlined in Chapter 3 and the Getzels-Guba framework already introduced.

In the study, information from sixteen schools, eight English, eight Western Australian, will be utilised. Ninety-six interviews, a week's participant-observation in each school and seven hundred and fifty-nine responses from the teachers to a prepared questionnaire will form the basis of the evidence. Both phenomenological and quantitative techniques will be employed.

After an analysis of the findings, a series of recommendations to school level and system level administrators will be proposed.

CHAPTER 2

LITERATURE AND RESEARCH REVIEW

Both the literature and the research relevant to an organizational analysis are extensive since all the various themes must be considered. It seems important to outline the theoretical base before proceeding into the literature of educational administration as such. The research reviewed, mainly that with an educational background, will contain reference to procedures and topics finally considered peripheral to the current investigation. Only by examining the whole field of literature and research into organization will it be reasonable to select those aspects most pertinent to this study.

A: The Theory

Writings in organizational theory reveal little consensus of opinion and conflicting and quite often incompatible schools of thought. Studies of human behaviour are complex and cannot be paralleled by the more quantitative and measurable forms of investigation.

EARLY THEORY

Administration was first examined from the managerial point of view, the processes of management being seen as the cornerstone to good organization. In his so-called "scientific

management", Taylor (1911) advocated such action as the study of time and motion to improve efficient output, wages being related to productivity and workers used according to their optimum aptitudes and abilities. Managers were to plan the work, standardise the methods and design their organizations so that they improved the co-ordination of activities among the various specialist departments.

The 1916 writings of Fayol (trans. Storrs, 1949) influenced Gulick (Gulick and Urwick, 1937) to identify the elements of administration as Planning, Organizing, Staffing, Directing, Co-ordinating, Reporting and Budgeting (POSDCORB). Focussing attention on these administrative aspects brought forth the response that those on the receiving end of management could not be overlooked. Over many years, Follett had argued that the central problem of any enterprise was the building and maintaining of dynamic yet harmonious human relations (Metcalf and Urwick, 1940). The Hawthorne experiments of Mayo and his associates established beyond any doubt the influence of the individual on the output of any enterprise (Etzioni, 1964:32-35). Clearly and unexpectedly, it was demonstrated that the attitudes of workmen were more important to productivity than the physical conditions in which they worked. The series of experiments spawned by this simple discovery confirmed both the primacy of social norms and the importance of effective and sympathetic leadership.

By 1938 Lewin, Lippit and White had defined three types of leadership, autocratic, democratic and laissez-faire, and had established to their satisfaction (and that of many others at the time) that democratic leadership produced the best attitude towards

work (Etzioni, 1964:36,37). This simplistic conclusion, although crude in comparison to more recent studies in leadership and now largely discounted, was nevertheless indicative of a movement slotting the study of administration into the realms of the social scientists.

Weber was also influential in giving cognizance to the role of the individual participant. Whilst bureaucratic organizations were seen as needing to enforce their rules and regulations, Weber recognized that worker obedience was necessary if the organization were to function effectively. He concluded that the unwilling conformity of the participant alienates him and he is unlikely to co-operate except for ulterior motives or whilst under the influence of the power structure of the organization. The worker will cooperate with power seen as legitimate but there are constant pressures for the bureaucrat to follow norms alien to the organization (Weber, 1946 translation).

Barnard also played a prominent role in promoting the cause of the individual. He summarised his views on organization as follows:

> "Organization, simple or complex, is always an impersonal system of co-ordinated human efforts: always there is purpose as the co-ordinating and unifying principle: always there is the indispensable ability to communicate, always the necessity for personal willingness, and for effectiveness and efficiency in maintaining the integrity of purpose and the continuity of contributions."
> (Barnard, 1938, reprinted 1962;94,95)

Meanwhile, Maslow (1943) made his contribution to the foundations of organization theory. His "Theory of Human Motivation" hypothesised the hierarchy of needs a person has. Man was seen as

a **perpetually wanting animal** who, as his lesser need was satisfied, saw the next prepotent need emerge. It was claimed that it should be possible to formulate a positive theory of motivation which would satisfy these hypothetical demands at each level. Maslow's contribution was a forerunner to many incursions into the field by psychologists.

The influence of two other contributors helped set the scene for modern theory. Simon (1945) subtitled his major work "A Study of Decision-Making Processes in Administrative Organization" and focussed attention on the importance of careful analyses of administrative strategy. Parsons (1937), often abstruse, attempted to construct a general theory of social action.

By the mid 1950's the study of organization had entered a new phase. Sociologists, psychologists, economists, philosophers, political scientists and educators all looked at the processes with their own perspectives. The writing and investigation proliferated.

MORE RECENT THEORY

The strains between organizational demands and participant needs have been well sustained in the literature. Attempts to classify theories of various authors generally appear to be unsatisfactory since there is a good deal of concept overlap. Before such a classification is attempted some of the more important of the contributions to the theory will be given in approximately chronological order.

Drucker (1953) saw American society as becoming an employee society based on and ruled by status. Despite his dependence upon

Weberian concepts of bureaucracy, he saw the new social order dominating and affecting the values of the community. The interaction of person with person through a relationship to the organization stressed the role of the individual, who was seen as having rights which certainly influenced the way in which bureaucracy could behave.

Gouldner (1957,1958) saw social roles as influencing organizational behaviour. People were seen as affecting what happens because they have reference groups and value commitments which conflict with those prescribed for the organization to which they belong. These latent social roles may be analysed in terms of loyalty to the organization, commitment to professional skills and values, and the orientations of the reference group. Classification of participants as **cosmopolitans** or **locals**, depending upon their prime orientation, enabled Gouldner to demonstrate the tension that is caused by the need for organizations to gain both loyalty and expertise simultaneously.

The X and Y theories of McGregor (1957) highlighted that writer's conviction that creative human energy could become available within an organizational setting.Theory X expounded the conventional view of management tasks: to get things done by controlling the people in the organization by means of persuasion, rewards, punishments, direction. McGregor maintained that this method was incorrect. Human behaviour within an organization is a consequence of this management philosophy, not an outcome of Man's nature. Human motivation, according to him, had been well explained by Maslow's needs hierarchy but the usual 'carrot and stick' approach by management did not satisfy inherent needs. Theory Y was an attempt to do so. According to this approach, management could harness the

drives already present in people, make it possible for them to recognise their own potential, allow employees to achieve their own goals by directing their efforts towards those ends compatible with organizational objectives. McGregor felt that the application of this theory would be achieved in small steps but that such practices as decentralisation and delegation of authority, participation and consultative management, and performance appraisal were examples of the precepts of Theory Y already in use,

Over a period of many years, Argyris, using a social science approach, attempted to find a "systematic framework by which to analyse the nature of the relationship between formal organization and individuals and from which to derive specific hypotheses regarding their mutual impact". By looking at some of the properties of each of these and assuming that each was of importance to the other, he concluded that there is a lack of congruency between the neeeds of healthy individuals and the demands of formal organization, that this incongruency will lead to disturbance, the results of which are frustration, failure, short time perspective and conflict. The subordinate will experience competition, rivalry, insubordinate hostility and will develop a focus towards the parts rather than the whole (Argyris, 1957). Argyris saw human beings as need fulfilling, goal achieving entities who will create strategies to fulfil needs and achieve goals: to organize themselves is one of their most common strategies. Borrowing a concept from the physical sciences, he developed a simple model for analysing an organization, a model dependent upon input, output and feedback to the input. What emerged from his application of the model was a belief that greater understanding of the organization would eventuate and

predictions about future human behaviour in the organization would be possible (Argyris, 1959). Individual health was seen as determining organizational effectiveness: the satisfaction or dissatisfaction of the worker was paramount. Reviewing the work of others in this field almost twenty years after he first started his investigation, Argyris saw much development of his themes but no reason to change the emphasis from examination of the self actualisation of the individual within the organization (Argyris, 1973).

The same themes emerged from the statements of Getzels and Guba. In an attempt to conceptualise administration on a theoretical level they examined major issues, one of which was the problem of institutional and individual conflict. They described these as the two major classes of phenomena of the social system and claimed them to be "conceptually independent and phenomenally interactive" (Getzels and Guba, 1957:424). The institutional side was seen in terms of its role and expectation and was said to constitute the nomothetic dimension. The individual side was seen in terms of personality and need disposition and these together constituted the idiographic dimension. The so-called Getzels-Guba model recognised both the independence and interdependence of the two dimensions and serves as a convenient basis for this present investigation.

Important statements by March and Simon, whilst maintaining the centrality of decision making in the administrative process, found some dysfunctional consequences of bureaucratic organization. These dysfunctions, for the main part, were caused by unanticipated reactions by individuals and by the individual decision to

participate or not in the organization (March and Simon, 1958,1958a).

The late 1950's and early 1960's saw a number of statements relevant to the human relations/psychological approaches. Whyte (1959) was concerned to analyse human relations in organizations and he devised a model based on personal interaction, activities and sentiments which he saw as interdependent in an organizational setting. Likert (1959,1961), who saw conflict arising between performance goals of the organization and supporting relationships of the individual, set out to derive an organizational structure involving subordinates in a satisfying way. This particular author continued to make contributions to the field, particularly in educational administration, and he has since updated these earlier theories (Likert, 1967,1970,1971,1972). Stogdill (1959) sought the relationships between productivity, integration and morale and demonstrated the last two to be equally important to the first in maintaining an organization effectively. Cartwright and Zander (1960), among the pioneers of the idea of group dynamics, saw group locomotion and group maintenance as separate, but interrelated, dimensions.

Katz and Kahn (1966) saw in organization a production orientation and an employee orientation. Differentiating between object-moulding and people-moulding organizations, they stressed the need for there to be a motivational basis for the persons involved. Blau and Scott (1960,1963), after comparing existing theories, proposed a concept based on prime beneficiaries as a means of classifying organizations. By asking the question, who benefits most?, it was seen that owners, workers, clients all benefited to some extent and their continued participation was dependent upon

satisfaction. Porter (1958,1959,1961,1961a,1963,1963a) stressed the importance of self perception by the worker and, developing the themes of Maslow, produced a number of statements relating to the needs fulfilment of the individual within the organization. Attempting what he called a structuralist approach, Etzioni (1964) attempted to synthesise the formal scientific school of thought with the informal human relations school. His work has particular relevance in so far as it examines professional and semi-professional organizations and professional employees within them.

Two theorists of the period, Halpin and Herzberg, deserve more than passing reference. Like others, they recognised the twin aspects of organization and individual and their work has been widely used in subsequent research. Halpin (1966) began his investigation by looking at the behaviour of administrators, administrators being seen as the leaders within the administrative process. Basing his theory upon some earlier work by Hempill and Coons (1957), Halpin expounded his paradigm for research on administrative behaviour and identified four sets of variables: the organization task, leader behaviour, group behaviour and administrator effectiveness. From this outline two avenues of research were proposed, the examination of how leaders behave and the examination of organizational climate. These have become the two most commonly tested aspects of organization, particularly in schools. The instruments espoused by Halpin, the Leader Behaviour Description Questionnaire (LBDQ) and the Organization Climate Description Questionnaire (OCDQ), have become the most used research instruments in the field. What is of particular interest here is that the two measured aspects of leader behaviour, namely **initiating structure** and **consideration**,

relate directly to organization demands and individual needs. Similarly, the eight identified characteristics of organizational climate may be related specifically to these same two variables. Aloofness, production emphasis, thrust of the leader and esprit of the group typify the organizational side, whilst the consideration of the leader, the disengagement, hindrance and intimacy of the group characterise the individual side.

Herzberg is notable for his motivation-hygiene theory of job attitudes (Herzberg, Mausner and Snyderman, 1959). Based on models of when workers felt good or bad about their work, Herzberg concluded that bad feelings were generally related to the context of the job and its environment, whereas good feelings were associated with job experiences and job content. Those aspects that satisfy, that is, the content of the work itself, were labelled motivators and those that dissatisfied, that is, the context items, were called hygiene factors. This is the basis of Herzberg's two factor theory of motivation. The hygiene factors, like the medical term used, are preventive and environmental but they do not of themselves lead to satisfaction. They are necessary to prevent negative motivation. Positive motivation only comes about as a result of the motivators. An individual needs a job with a challenging content in order to be truly motivated. This particular theory explained why higher pay, better working conditions, more fringe benefits, all hygiene factors, did not of themselves improve worker performance or satisfaction even though they were seen as necessary supplements. Despite considerable criticism of the theory, notably by Vroom (1964), few would question that it contributed substantially to work motivation. From the point of view of this research, it

reinforces the contention that organizational and personal aspects of management are of interrelated importance.

A number of other general theorists have made notable contributions to our understanding of management processes but they have had little impact on the direction of this particular study. They include those who have advocated systems of management such as "Organizational Development", or O.D., (Lawrence and Lorsch, 1969), and "Management by Objectives", or MBO, (Humble, 1970).

This current study has been influenced to some extent by the proposal of Sollenne (1978) to utilise the Getzels-Guba model as a means of analysing a problem. Sollenne saw a transactional decision as one which gave consideration to both role and personality. He compared the nomothetic and idiographic dimensions of Getzels and Guba with different aspects of McGregor's X and Y theories and Maslow's needs hierarchy. In the school setting, the principal is seen as needing to sit somewhere between the two extremes of ruthless administrator and weak submisser.

CLASSIFICATION OF ORGANIZATION THEORY: A SUMMARY

Organization theory may be conceptualised as being a continuum, the two extremes of which are minimum and maximum emphases on the degree of individual participation. Five major stages are hypothesised, as shown in Figure 2.

For the purposes of this study, contributions to or techniques of organization theory and management have been classified according to the table. The results are summarised in Appendix A: "Organization Theory Classified according to the Participation

Continuum". Even allowing for unsuitable categorisation of some contributions, the Table clearly shows the declining emphasis of theory focussing primacy of attention on the organization and the increasing recognition of the role of the personnel within the organization.

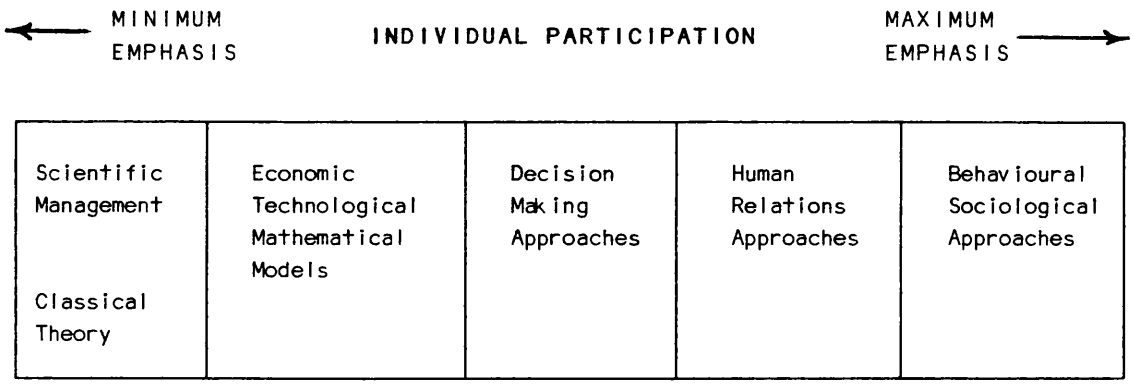

Figure 2: Theories of Organization: Organizational Participation Continuum

Organization theory consistently stresses the twin aspects of institution and individual. There is ample justification in the present investigation for highlighting the role of the teacher within the school.

EDUCATIONAL ADMINISTRATION

Educational administration as a field of study in its own right became prominent in the late fifties and early sixties Writers applied organization theory to the setting of schools and educational institutions and developed the themes and concepts. Currently, writings in educational administration appear as prolific as any branch of the study. The literature covers the whole spectrum of approaches evident in organizational theory. Those quoted here

focus on the relationship between persons within the organization and the organization itself, and are therefore relevant to the study being made.

a) ROLES

(i) Leadership/Followership

The work of Halpin is significant and his Theory of Research in Administration (Halpin, 1966) a landmark. The test instrument measuring leader behaviour, the LBDQ, has been widely used in the education context. The two identified variables, initiating structures and consideration, correspond approximately to the nomothetic and idiographic dimensions used in this study.

Like Halpin, Likert designed influential instruments to test leader behaviour and, co-incidentally with Halpin, organizational climate. Likert discussed leadership and membership roles and saw effective work groups linked together as making the greatest use of human capacity (Likert, 1969).

Gross and Herriott were others influential in examining leadership in the school setting. The latter pair reported on a national survey of elementary school principals, testing what they termed their Executive Professional Leadership (EPL). The means of investigation, a 192 page test instrument that takes twelve hours to complete, understandably has not been widely used in its full form, but its exhaustive analysis has been the genesis of much study. One who was greatly influenced was Hughes, who based his research on the Gross and Herriott model and concluded in his many writings that the effective school head must be both Chief Executive and Leading Professional (Hughes, 1972,1972a,1975a,1976,1977,1978).

Such a conclusion reinforces the dual theme evident throughout the literature and in this study.

Another English writer made similar observations. Hoyle (1969a) looked at the role of headmaster and claimed that he must be both task orientated and person orientated. He asserted that "when both role and personality are fulfilled in the same action, then the individual will experience satisfaction; if they are not, then the individual will experience conflict" (Hoyle, 1969a:4). Hoyle (1975) also wrote on leadership and decision making.

Baron's initial thrust was towards the political aspects of school management but he also examined closely the role of the English headmaster within its historical context. The English head was seen as unique, in every sense the pivot and focus of his school in the tradition of Arnold of Rugby (Baron, 1975). He also put the case that administration is an integral part of the learning situation and not extrinsic to it (Baron, 1975a).

(ii) Supervision

Earlier writings prescribed a definitive supervisory role: Wiles (1950), Harris (1963) and Barry and Tye (1972) were of this type.

The development of the study of education administration made it clear that the supervisory role was both changing and in need of change. In examining the function of the principal in rating teacher effectiveness, Enns (1965) concluded that the role of the principal is to help, encourage and stimulate and that, as a result, it is dubious if he should be involved in formal evaluation.

Dettman, a former Director-General of Education in Western Australia, described the changing role of official supervision by

his Department (Dettman, 1969). The term **inspector** was dropped and replaced by the less offensive **superintendent**. The role of the superintendent was to be one of encouraging professional development and consultation. The old system of grading teachers on a performance scale was abandoned altogether, with formal assessment of teachers only occurring at critical stages in their careers. Such moves came about because it was recognised that teachers valued their professional role and gave better service when involved in helping to shape policies.

b) PROFESSIONALISM

The contribution of Corwin (1963) to the theme of professionalism is discussed later in the review of research. Corwin saw professionalism as a movement by teachers to gain status. As such it was a conflict point and a militant process. Corwin proposed that an emerging profession such as that of teaching must achieve more authority over the policies that govern its work. In his view, a bureaucratic-professional role conflict was evident (Corwin, 1970). The terms used are indicative of the trend of his thinking, **militant professionalism**, (Corwin,1965,1968,1970) and **staff conflict** (Corwin, 1963).

Two of the prominent British writers, Hoyle and Hughes, are others who developed the professionalism theme. Hoyle (1975a) drew a distinction between what he called professionalism and professionality. Professionalism is the process of trying to improve status, salary and conditions, whilst professionality refers to the teaching skills, knowledge and procedures employed. In his view, teachers must respond to the demands of an extended professionality.

It is a question of responsibilities rather than rights. Hoyle reminded his readers that two themes recur in the literature on professionalism; (i) the autonomy of the practitioner and (ii) the control of the organized profession over the services it collectively offers. The logical conclusion of Hoyle's argument is that teachers will be striving to control the broader context of teaching and that this is indicated by moves towards greater collegiality in policy making. Hughes wrote of the professional responsibility of the headmaster who must of necessity be more than just an administrator. As a result of his research, he was able to confirm that heads were expected by staff to be professionally active both inside and outside their schools and that they were expected to promote educational innovation. Few heads measured up to these expectations in the Hughes study but the extended professional was seen as the ideal.

c) INTERPERSONAL BEHAVIOUR

Sociological, psychological and human relations approaches early focussed attention on the interaction of persons in organizations, a proposition that reference to some of the literature will readily confirm.

(i) Griffiths, with others, provided a useful starting point. The effective organization of schools required action and interaction by staff, according to their statement. (Griffiths et al, 1962).

(ii) Wolcott (1973) examined the school as a cultural institution. In his case study of a particular school he saw much evidence of organizational conflict and staff interaction.

(iii) Hoyle (1965) looked at organizational analysis in the

field of education. In a comprehensive review of the development of relevant theory, he recorded some of the many studies that have indicated the interaction between participants: the compliance principle of Etzioni; the decision making of Simon; the communicating processes of Barnard; the psychological anxiety of Presthus; and general social systems theory of Parsons, to name only a few. Hoyle made it clear that there is still no universally acceptable methodology.

(iv) Richardson (1973,1975), in a case study report, underlined the interaction and conflict within the staff of an English comprehensive school, emphasising the use and value of consultation in carrying out the school programme.

(v) Bennett and Wilkie (1973) also examined the school in relation to Organization Theory. These writers argued that organizations are social units constructed to seek specific goals. These goals in schools are partly determined by staff participation in decisions, particularly through the interaction of staff in meetings and committees.

(vi) Watts (1977) described his own experiences as Headmaster of the Countesthorpe School in England. Decisions were made by consensus of staff, students, non-teaching staff and parents. He proposed that the headmaster's powers must be spread within the school if they were not to be usurped by central bodies such as local education authorities.

(vii) Webb (1970) claimed that effective management of a school depended upon the way the system was designed. The groupings of the school, whether pedagogic, social or pastoral, were described as strongly interactive.

(viii) Gray (1975) examined conflict within the school and stated that it arose out of the varying demands of the members of the institution.

d) ORGANIZATIONAL CLIMATE

Contributions by Halpin and Likert have already been mentioned. The OCDQ of Halpin and the Profile of a School of Likert are the most widely used instruments to test school climate. The writings in support of these have been highly influential. Both these writers appeared to approve of an open rather than a closed climate, the OCDQ, for example, attempting to determine the openness of a school (Halpin, 1966). Again, there is a wealth of material indicating interest in the topic, which a representative sample confirms:

(i) Lipham (1975) used the concept of Competency/Performance-based Administrator Education (C/PBAE). Using the interaction inherent in the Getzels-Guba model, Lipham stressed the very real nature of an organizational climate which exists as the result of relationships between the organization members and the organization goals.

(ii) Slater (1969) examined climate in South Australian schools. Although, strictly speaking, this work was experimental rather than theoretical, the article by Slater and another by Thomas and Slater (1972) were influential, dampening somewhat enthusiasm for the use of the OCDQ in Australian conditions.

(iii) Hughes (1968) inquired into the process of innovation as it related to organizational climate. From his research he concluded that innovative school districts had a more open climate

than non-innovative districts and that for planned change to be effective an open climate would have to be promoted.

e) CHANGE AND INNOVATION

Part of the educational administration literature concerns itself with change and innovation. Apart from books exclusively on this topic (for example, Miles, 1965; Baldridge and Deal,1975), most major texts devote sections to this aspect (Getzels, Lipham and Campbell, 1968; Lane, Corwin and Monahan, 1966; Carver and Sergiovanni, 1969). A small selection of theories is given below:

(i) Newell (1975) looked at Organization Development in schools. He claimed that recent innovations had not lived up to expectations, that efforts had collapsed because of the limited attention given to organizational context. Organization Development approaches were seen as one way of attempting to achieve organizational health.

(ii) Two studies by the Open University described attempts to apply systematic change within two British schools. Organization Development at the Sheldrick High School and MBO at the Sydney Stringer School were outlined (Course E321, Units 6 and 2 respectively). These detailed observations of school change have been widely studied by students, at least in the United Kingdom.

(iii) Bassett (1971) covered change in Australian education. He saw three faces of innovation, their source, their nature and the kind of influence producing it. Using these as the basis, he constructed an elaborate three-dimensional model for describing adjustment to an education system. Bassett's description applied generally to education within the national rather than at the school level.

(iv) Bolam (1975) wrote on the management of educational change. Despite what he acknowledged to be a bewildering variety of models and theories, with frequent terminological and conceptual overlap, Bolam proposed the construction of his own framework. The conception was applied in a pilot scheme from which the author concluded that the crudeness of the exercise clearly indicated how far short we still were of having an adequate theory of change.

(v) Thomas (1978) looked at the problems associated with the need to change and improve educational systems and institutions. He claimed that the rapidity with which the social context of education was changing was not being matched by the rather slower rate of change in schools. He offered a model aimed at assisting administrators to effect beneficial change.

The examples quoted are only the tip of the iceberg. Such a wealth of writing and theorising has inevitably spawned an imposing array of varied research.

B: The Research

The studies to be examined will be primarily those related to educational administration. At least one respected apologist has argued that there are peculiarities in educational administration that make it a special case. People processing is somewhat different to product processing (Campbell, 1958).

The nomothetic and idiographic dimensions of Getzels and Guba provide a useful framework for classification of the extensive research. In reporting individual projects, as far as possible,

items will be recorded under one heading only, even when the topic clearly covers more than the single strand implied.

NOMOTHETIC DIMENSION

Studies of the school as an organization have been hindered by the complexity of the task. For convenience, investigations will be recorded in four subdivisions: administration and organization, climate, change and innovation, and policy/decision making.

(1) ADMINISTRATION AND ORGANIZATION

Research into administration and organization of schools is particularly pertinent to the present investigation. Studies may be broadly grouped as follows:

(i) A number have looked at the effect on pupils rather than organizational outcomes. Pupil response certainly must influence school climate and therefore be considered relevant. Several studies have looked at stratification of pupils within schools.

Lacey (1966) examined the social environment of a grammar school. His overall aim was to provide a picture of the development associated with academic streaming. He concluded that a relationship exists between organizational structure and the development of pupil sub-culture.

As observer-participant, Hargreaves (1967), in the secondary modern school, and Wakeford (1964), in the independent grammar school, demonstrated that streaming generates sub-cultures within

the school.

Newbold (1974/1975) looked at the effects of organization in a comprehensive school, referring specifically to ability grouping. The social and economic consequences of homogeneous and heterogeneous ability groups in Year Eight in one school, where both organizational patterns existed, were examined. The study concluded that heterogeneous ability grouping was associated with greater mixing of pupils out of the classroom and an improvement in attitude of pupils of lower ability to such organization. No evidence could be found that mixed ability grouping held back students of higher ability, although teachers, particularly those with no experience in teaching mixed ability classes, had reservations about this conclusion. This research is supportive of mixed ability classes, claiming that they lead to social advantage without academic disadvantage.

Thompson (1972, 1973), also employing a case study technique, looked at the effects within a school of transition from a streamed to an unstreamed form of organization in a large comprehensive school. A number of factors, including examination results, voluntary retention rates, the performances of "selected" and "non-selected" pupils, and the influence of the house system, were used. The evidence from this experiment suggests that, provided the organization has the support of staff, heterogeneous grouping is a more favourable structure for the vast majority of pupils, including the able ones, than a streamed system.

King (1969) also scrutinised pupils within schools, relating their involvement to school values. It was concluded that for pupils of low stream status, the degree of involvement was related

to acceptance or rejection of the school's values, but this was not so for those of high stream status. In general, it was observed that school involvement does not appear to be an important mechanism for value transmission.

Ford (1969) is one of a number of British investigators who examined the case for or against the comprehensive school. Adopting a case study technique, she concluded that seven arguments used in favour of comprehensive education could be sustained in the school she selected. Ford's study is valuable in particular because of its discussion on the effect of labelling on pupil performance.

This group of studies demonstrates that organizational factors affect student performance and must therefore be considered important by teachers.

(ii) Another group of studies has used survey techniques.

A survey of comprehensive schools and their organization was carried out under the auspices of the National Foundation for Educational Research. Three hundred and sixty-five comprehensive schools were included in the investigation and facts and figures rather than conclusions emerge. It is of interest to note that by 1968 (only three years after comprehensive education became official policy in England), the pupils in the schools of the sample at that time displayed neither a normal spread of ability nor a well distributed cross-section of the community (Monks, 1968).

A member of the same team, Bates (1971), looked at the administration of comprehensive schools with particular reference

to the relationship between the work of the teachers and the nature of the comprehensive school in which they serve. Using as a base fifty fully developed comprehensive schools, as nearly nationally representative as possible, Bates carried out some four hundred and fifty interviews and examined considerable documentary evidence. It was intended that the investigation be factual rather than evaluative. The specific aims were to describe the administrative processes based on the work of teachers, to examine the effects of different structures on internal administration and to encourage the development of theory. In all, the research made forty-six separate findings. Among the more important conclusions were the effect of the salary structure on school organization, the need for teachers to be committed to a pastoral system before it could be seen to work, the lack of involvement of students in important decisons, the extent to which ad hoc decisions were made in schools and the differences created by school size and location. The overall impressions of secondary comprehensive schools were of their complexity or organization and their infinite variety.

Dierenfeld (1976) looked at the house system in comprehensive schools. An American impressed with the welfare programmes he saw operating in British schools, his research is substantially a description of the functioning of the house system but he does conclude that it works optimally in purpose-designed buildings.

From this group, the findings again reinforce the conclusion that organizational structure is a vital ingredient in organizational performance.

(iii) A third set of research has concentrated on staff interaction and the social structure of the school environment.

Richardson (1973,1975) examined in detail the workings of one comprehensive school in which she was observer-participant. Her published report is widely read and quoted and represents a statement of her role as consultant to the Headmaster and staff of the Nailsea School in Bristol.

Recognising the many problems that beset the secondary school in the late 1960's, Richardson set herself the task of studying leadership and staff relationships and to do this by means of a collaborative research programme. This involved working with a number of committees and coping with the stresses and strains that the interpersonal relationships brought forth. Attempts to improve the pastoral and the curricula systems demonstrated the conflicts between the varying roles of the teacher and highlighted the difficulty of giving the two sides of the problem the same focus of attention. Throughout her consultancy Richardson acted as a catalyst in staff negotiation and maintained a continuous dialogue at all levels. The aim was to evolve what she called a continuous staff conference. In a second statement, she described the changes that took place in the school. Her work throughout represents a most detailed coverage of the complex organizational pattern within a school.

Coughlan (1970) investigated the social structure of what were described as closed and open schools. This study examined the ways in which teacher work values affected group development. The findings suggest that different types of formal organization do generate dissimilar social structures which are related to

the disparate value orientations of teachers. For purposes of his study, Coughlan devised a research instrument to determine the relative state of openness of a school.

A number of other studies which are reported elsewhere in this review could be considered under this classification. The interaction of teachers with the school organization and with each other is central to the theme of the investigation.

(iv) A fourth group has examined the effect of organizational structure upon other aspects of the school.

Terrien and Mills (1955) examined the effect of changing size upon the internal structure of schools. They satisfied themselves that the larger the school, the greater the proportion of its resources given over to administration.

Adams (1969) examined the relationship of teacher alienation to the organizational structure of schools. In this instance, perception of structure was based on teacher opinion using an instrument prepared by Mackay. The writer concluded that when teachers perceive a high degree of centralisation of authority and rule structure in the school they tend to feel more alientated from the work and fellow workers. Conversely, those perceiving less formal structures are less alienated. It is contended that a teacher's sense of involvement and power to affect conditions over his work are directly related to his perception of the organizational structure of the school.

Adams, Kimble and Martin (1970) compared organizational structure with school size and teaching practices. Several of

the many tested hypotheses were confirmed. It was found that the greater the school size, the greater the emphasis on communications to the teacher and the greater the emphasis on prescriptive rules. The study also determined that the more senior the classes in the school, the greater the emphasis on understanding and on free communication. Ten of fourteen propositions were not confirmed. It seems that school size does not affect teaching style or the intrinsic motivation of pupils.

Barile (1971) found some significant relationships between organizational structure, teacher personality and role behaviour. Fundamentally, the more complex the school the greater the difficulty the teacher had in adjusting.

This set of studies confirms the importance of structure on teacher response to the school.

(v) A fifth group has used the bureaucratic model to examine organization and administration and its effect upon schools.

Moeller (1962), relying on a set of bureaucratic characteristics identified by Blau, tested the teacher's sense of powerlessness to affect school policy. Contrary to expectation, teachers in bureaucratic systems had a greater sense of power than those in less bureaucratised systems. Teachers in the less bureaucratic systems appeared to have less need of a feeling of power within the organization but apparently they had less certainty about outcomes. There is seen to be more predictability in bureaucratic school systems.

Some investigations into bureaucracy in schools have relied

on the classification provided by Hall (1961). He identified six characteristics of bureaucracy and developed Likert-type scales to measure them. In his study he found bureaucratic dimensions present in any organization in the form of continua rather than either present or absent, as models had appeared to claim.

Mackay, Robinson and Punch were three who applied Hall's classification to the school situation. Mackay (1964,1964a) modified Hall's instrument slightly to suit the educational environment, demonstrated that the instrument was useful for school organizational analysis and concluded that a high degree of hierarchical authority was associated with low effectiveness rating and low pupil achievement. According to the research, pupils in schools where authority relationships were minimised, performed better. Mackay also claimed that where authority relationships are of the bureaucratic type, teacher satisfaction is significantly reduced. Over-centralised decision making seriously reduces the effectiveness of the principal as instructional leader. There was seen to be a two-fold weakness in bureaucratic schools in that staff members do not perform to capacity and the decisions made are likely to be poor because the mechanism for decision making is cluttered with routine and low-level problems.

Robinson (1966) related the professional role orientation of teachers and principals to the bureaucratic structure of their schools. Using the instruments of Hall and the Professional Role Orientation Scale of Corwin to measure the variables, he concluded that neither staff nor principals' professional scores were related to any of the six bureaucratic dimensions. What the research revealed is that there is a significant difference between schools with

respect to their bureaucratic organization.

Punch (1969,1970) modified the Mackay instrument and administered it in forty-eight schools. Results again indicated the capacity of the instrument to discriminate between schools in terms of organizational bureaucratisation. They showed that certain of the bureaucratic dimensions, namely, hierarchy of authority, rules for incumbents, procedural specifications and impersonality, tend to cluster together in the same schools whilst the other two variables, specialisation and technical competence, are similarly linked within schools. Some schools displayed both cluster groups, some did not. Punch did not establish his main hypothesis, that bureaucratic structure in schools could be conceptualised as a unitary homogeneous variable, but he did establish that it could be seen as a two-factor concept loosely linked around bureaucratic and professional constructs.

Cohen (1970) also used the concept of bureaucratic role in relationship to school size in a research project carried out amongst three hundred and forty-three randomly selected heads from English and Welsh schools. The major hypothesis, that the size of the school is related to bureaucratised role conceptions on the part of its head teacher, was confirmed. Cohen used nine features of bureaucratic head teacher role conceptions and demonstrated that heads of large schools gave significantly stronger support to ten of the seventy-eight propositions included in the test instrument. Each of the ten propositions was strong on authority, procedural regulations and individual school autonomy.

This small sample of research into bureaucracy in schools

indicates the value of this form of analysis. From the viewpoint of this study it stresses the importance of hierarchy and the processes of decision making in examining the totality of the organization of the school.

(2) CLIMATE

No overview of the school as an organization has been more exhaustively researched than that of its internal environment. Earlier reference has been made to the pioneering work of Halpin in the development of the concept of 'climate'. This metaphorical representation of the organization as a living entity has provided the means for systematic analysis.

a) Use of the OCDQ

Many of the investigations into school climate have used the Organization Climate Description Questionnaire (the OCDQ) of Halpin and Croft in either its original or one of its revised forms. This instrument examines four characteristics of the group and four characteristics of leadership behaviour, and for each, it attempts to place the school on a closed-open continuum. The result is a profile of propensities likely to show that the school is neither fully open nor fully closed in its climate (Halpin, 1966).

By the mid 1960's a number of uses of the instrument had been made. Flagg (1964) used it to relate climate to pupil achievement, size of school and teacher turnover. Sampling ten elementary schools in New Jersey, he concluded that the climate of each could be measured by the instrument, that the principal

tends to determine the climate of the school, that a closed climate tends to increase the rate of teacher turnover, that schools of increasing size tend to become more closed. He did not establish any relationship between pupil achievement and climate.

Heller (1964,1968) explored the relationship between the informal organization and teacher perceptions of the existing and desired organizational climate of the school. Contrary to hypothesis, he did not find that informal group perceptions of climate varied from total staff perceptions of climate but he was satisfied that the OCDQ was an effective measuring instrument.

Collins (1965) related individual personality and organizational climate, justifying such a comparison in terms of the two dimensions of Getzels and Guba. His research found significant differences in satisfaction levels among personality types.

Null (1966) looked at the relationship between organizational climate and personal staff variables. Like Flagg, he established that significant relationships did exist and in particular that teachers with (a measured) good attitude towards children perceived a more open climate than did those with a poor attitude. The schools in the sample identified as being the most open displayed the highest scores with respect to attitude towards pupils.

Using the OCDQ as a measure, organizational climate has been related to a number of other variables.

(i) Job satisfaction and Morale. The evidence points strongly to there being a difference in the morale of teachers in open

and closed climate schools, that teachers are more satisfied in schools that tend to be open. This is confirmed by the researches of Koplyay (1967), Hamlin (1967), McTaggart (1971), Smith (1974), Grant (1974) and Weiser (1975). Not every piece of research has reached this conclusion, Warren (1971) finding no discernible relationship between climate and job satisfaction and Morris (1976), in her sample of twenty-two schools, finding general dissatisfaction and apathy on the part of teachers regardless of school climate.

(ii) Staff Perception of the School. Research findings are that climate has a close correlation with staff perceptions of other aspects of organization. Climate is consistent with perceptions of principal behaviour (Helsel, Aurbach and Willower, 1969; Grassie, 1973), with teachers' sense of power (Trast, 1976), with perceived degree of participation in decision making (Bergstein, 1972) and their manner of involvement (Adelson, 1972), with student-teacher relationships (Redmond, 1975).

(iii) Leadership Behaviour. The relationship between climate and leadership behaviour is not conclusively demonstrated by use of the OCDQ. Among those who found no significant relationships were Wiggins (1969), Lee (1975), Weaver (1975). Garber (1975) concluded that the more punishment-centred the administrator, the less open the school climate. A useful conclusion of Sargent (1967) was that principals and teachers do not agree in their estimates of the various dimensions of climate.

(iv) Miscellaneous Factors. Climate, as measured by the OCDQ, has been related to various school organizational ingredients. Calvery (1976) found many of the bureaucratic measures of Hall

predictive of specific aspects of climate. Gresso (1975) found that schools heavily committed to self-paced learning were significantly more open than those partly committed. Hughes (1968) claimed that schools in innovative districts were more open in climate than schools in conservative districts.

Validity of the OCDQ

Although some research evidence supports the validity of the OCDQ (for example, Andrews, 1965), there is increasing doubt about the value of the prototypic profile method of designating discrete climates, particularly in complex secondary schools. Among those who have concluded that the results should be treated with some caution are Carver and Sergiovanni (1969), Slater (1972) and Hoy (1972). The comments of one observer are pertinent. He claimed that "the correlation of variables with the dimension of organizational climate has proved a more profitable approach than with the global categories" (Thomas, 1976:55,56). He goes on to point out that the bulk of studies using the instrument have been undertaken for higher degrees for which the OCDQ had received "bandwagon" status. Nevertheless, as he pointed out, its contribution to the understanding of school environment has been considerable.

b) Use of the "Profile of a School"

The second most commonly used instrument of investigation into school climate in the United States has been Likert's Profile of a School. This particular device is a school-based adaptation of early instruments designed by Likert to measure organizational and performance characteristics generally (Likert, 1967). Likert's

authoritative-participative continuum corresponds to the closed-open continuum of the OCDQ.

Studies using the Profile have closely paralleled those using the OCDQ and the results are as equivocal.

Feitler (1971) found some significant relationships between principal leadership style and school climate, but, as with earlier studies, these were specific characteristics of the principals related to specific features of the school profile.

Shaw (1975), Stewart (1976) and Welch (1976) examined job satisfaction with respect to climate and found some evidence of positive correlation in favour of schools with more open climates. Welch and Stewart have in common that they also examined organizational change and effectiveness and these two studies closely parallel each other. Neither supports the contention that organizational climate affects or is affected by change.

Moser (1974) and Murphy (1974) used the Profile and the Purdue Teacher Opinionnaire to study the relationship between climate and morale. No significant correlation was found but, as in previous studies, particular relationships between aspects emerged.

Conway (1973) and Falls (1976) used the instrument to make comparisons with participative decision making. Laughlin (1973) examined teacher perceptions of climate: as with OCDQ results, no simplistic conclusion relating climate in general terms to the many variables was found.

c) Other Analyses of Climate

Of the other instruments designed to measure climate,

three have had particular influence.

(i) Fox, Schmuck, Van Egmond, Rituom and Jung (1975) described the COPED study (Co-operative Project for Educational Development) in which they aimed to identify ideas and concepts relevant to educational change and to develop a core package of instruments to measure key aspects of a school system's capability for self renewal. The thirty instruments are for use by school systems rather than research as such but they have been validated and represent a large scale attempt to enable schools to diagnose their professional climates.

(ii) Finalyson, Banks and Loughran, (1972) attempted to produce an instrument along the lines of the OCDQ pertinent to British circumstances. It did not seem to the authors that the OCDQ was sufficiently complex in design to meet the requirements of the British comprehensive school, although the main source of items was the Halpin and Croft document. The resultant :"School Climate Index" is extensive and consists of four questionnaires, one for pupils on pupil and teacher behaviour, one for teachers on teacher group behaviour, one for teachers on headmaster behaviour and one for teachers on head of department behaviour. Finlayson himself urges caution in the use of the instruments and the interpretation of the results. He suggests that the validity of climate scales is higher when the dependent variables are used but that the user must be aware of the problems of the method. He warns against drawing simplistic conclusions and doubts whether organizational climate as such should be the basis for any study. It is his view that the interpretation of scores should be treated with care and considered only within the social context of the particular

case in hand (Finlayson, 1973,1975).

(iii) In developing his Profile of School Climate Questionnaire (PSCQ), McKillican (1975,1978) was strongly influenced by the work of Likert. Likert had shown that the single distinguishing feature between successful and unsuccessful organizations concerned the decision process. Successful organizations were those able to make good decisions and to implement them. In this, the role of the leader is a vital ingredient. McKillican saw the need to investigate idiographic as well as nomothetic dimensions when examining school climate. He chose four main factors, formal leadership, peer leadership, work group climate and perceived school effectiveness and those led to eight discrete classifications which completed the Profile. The PSCQ has been extensively used in Ontario and in Western Australia, where it is employed as a diagnostic and remedial tool designed to help schools improve their effectiveness.

Relevance of Climate to this Study

Research into the climate of schools and means of assessing it has been emphasised because it represents the most serious attempt devised to make a systematic analysis of internal organizational environment. The fact that results are difficult to interpret and frequently inconclusive serves to emphasise the problems associated with a holistic approach. No attempt will be made in this study to ultise research instruments to measure climate. This method of analysis has been over-used. The contribution of the evidence is to direct this study towards other means of assessing organizational tone.

(3) INNOVATION AND CHANGE

The third group of researches looking at the whole school organization are those which have examined it during times of change. The definitive early text, the work edited by Miles in which a number of writers and researchers discuss the subject, reports on case studies or other research and generally examines innovation in the American education system (Miles, ed.,1964). This and other sources show the extent of research into this aspect of school procedures.

As with studies on school climate, many of the investigations relate change to the individual teacher. It was concluded, for example, that the closer a teacher sees himself as being a participant in decision making, the more likely he is to see himself as involved in innovative activity (Minninberg, 1970). Another research linked change with job satisfaction and found dissatisfaction with team supervision under changed circumstances (Barnett, 1970). Kennedy (1973) found very few links between teacher professionalism and innovative activity except for a tendency for highly professional teachers to participate more in changes. Another set of findings suggested that innovation depends more on the principal than on the teacher. Innovative principals, it was claimed, involved community and students in goal setting and decision making to a greater extent than did conservative principals. The same research found innovation more likely to flourish in flexible and open space schools rather than in traditional buildings (Walker, 1975).

Despite the abundance of research into change in schools,

it would appear to be unlikely to influence to any extent the shape of the current inquiry. If emphasis is to be on the way the school operates, then change, where it occurs, will be accepted as a fact rather than investigated as a phenomenon. Certainly, comprehensive schools, like other schools, are subject to change, and indeed are changing. One piece of research examined the combination of three grammar schools into a single, large comprehensive. The findings showed that during change, stable situations were threatened and new patterns emerged. The climate in which decision making took place was seen as critical. The study concluded that more attention needs to be paid to power distribution and its effect upon decision making during times of change (Oldham, 1975).

(4) POLICY OR DECISION MAKING

This would appear to be the most popular means of analysing organizational procedures. No fewer than one hundred and six of the research studies examined used the area of decision making as a means of investigating school functioning. As with other samples of research into the field, many link organizational decision with individual participation. This again serves to emphasise the difficulty of treating nomothetic and idiographic dimensions discretely.

Reference to decision/policy making procedures within the comprehensive school will clearly prove to be quite crucial to the present investigation. The way decisions are made is central to the operation of the school. In this review, studies will be classified under three sub-sections.

a) Decision Making and Morale Factors

A number of studies support the proposition that there is a strong positive relationship between participation in decisions, morale factors, job satisfaction and personal needs satisfaction. Among those confirming this are Blumberg and Amidon (1963), Smallridge (1972), Henderson (1976) and Feldman (1977).

A higher proportion did not sustain such a simple relationship between these variables. Among these may be cited the work of

(i) Bridges (1964), who concluded that the size of an institution was a more significant factor than the degree of participation.

(ii) Burket (1965), who demonstrated that leader behaviour in schools not seen as democratic could nevertheless produce high morale.

(iii) Haralick (1968), who concluded that the principal's compliance with work related norms was more important than the degree of democracy within the school.

(iv) Barrett (1969), who found that even though teachers without exception expect to participate, other factors influenced job satisfaction when they do not.

(v) Snyder (1971), who concluded that participation in decisions was accompanied by dissonance and it was the level of conflict rather than the degree of involvement that related to morale.

(vi) Prieto (1975), who found an equally high level of personal needs satisfaction in some authoritarian schools.

(vii) Smith (1975), who showed that the age of the teacher was important. The morale of younger, less experienced teachers

tended to be more dependent upon participation than that of older established teachers.

(viii) Mawter (1975), who found such a complex set of relationships between variables that he recommended matching teachers with school type. It is not so much the mode of administration that determines job satisfaction as it is the teacher's preference for degree of involvement in decision making.

(ix) Wells (1976), who found different levels of desire to participate and differences within sub-groups based on sex, age and tenure status.

These have been listed and the findings given to demonstrate the complexity of the relationships between decision making and morale factors. It is reasonable to conclude that the desire to participate varies and that not every teacher wants to be forced to be involved.

b) Decision Making and Desired Participation

To Alutto and Belasco must be credited the formalisation of the dimension of desired level of participation. Demonstrating that satisfaction levels are not uniform throughout the school population, they devised an instrument, the Decisional Participation Scale, which reveals the difference between those decisions in which an individual desires to participate and those in which he actually participates. From this distinction it has become possible to differentiate between those teachers who are deprived of opportunities for making decisions they desire to make, those whose decisional status is at equilibrium, and those who are

saturated, that is, they are forced to make more decisions than they actually care to make. Alutto and Belasco published widely in the journals and their work has been influential in other research (Alutto and Belasco, 1971,1972,1973; Belasco and Alutto, 1972, 1973).

The work of two researchers who utilised the Alutto-Belasco concepts of decisional deprivation, equilibrium and saturation should be noted.

Best (1973) used the Alutto-Belasco scale in comparing decisional status with morale. Teachers at equilibrium with respect to decisions had the highest levels of morale, the most positive attitudes towards their teaching and the adequacy of the school's facilities to help them fulfil their role. The instrument was seen as a most valuable means of establishing the priority of situations for which staff involvement is desired. Best was also able to distinguish between active and passive equilibrium with respect to decisional status. This would seem to be an important distinction. The study concluded that educational administrators should contrive to offer opportunities for teachers to participate no matter what their previous disposition towards involvement in decision making had been.

Conway (1973) used a modification of the Alutto-Belasco scale to test the relationship between levels of participation and organizational effectiveness. This investigator asked his one hundred and sixty-six secondary teacher participants to state the degree of involvement in terms of never, sometimes, often,

always, and he added some new decisional items to the original instrument. Like Best, he demonstrated that over-participation and deprivation both detract from teacher satisfaction. He also found a tendency for organizational effectiveness to correlate with a high degree of equilibrium amongst individuals. A few years later, the same researcher attempted to clarify the relationship between the power of school heads and the participation of teachers in school decisions in English conditions. Using the same modification of the Alutto-Belasco scale in eight schools in the Manchester area, he concluded that English teachers do perceive themselves as participating in most decision areas, although school heads effectively control those areas of power where tangible rewards and sanctions are evident. Participatory management appears to be supported in areas regarded by teachers as less important, including those which carry minimal expenditure of organizational resources. An implication of this particular study is that English teachers need to display competence in order to obtain status positions and therefore the ambitious make it their business to become involved. In the schools of the sample there was a direct link between status and participation, the role of the teacher in various positions being clearly understood throughout the faculty. In summary, Conway claims that English heads have managed to retain control even while there has been development towards participative management (Conway, 1978).

A similar conclusion, not utilising the Alutto-Belasco device, was reached by Sharma (1963). In a comparative study involving teachers in the United Kingdom and the United States of America, it was found that a teacher desires participation

in those decisions that affect him.

c) Decision Making and Other Factors

Decision making has been related to almost every facet of organization, many agreeing with Simon (1957) that this is the central point of the administrative process.

A number of researches have examined the extent to which teachers do participate. The evidence is that participation varies markedly between institutions. Harman (1967) found little involvement by staff in a United States college of advanced education. Godfrey (1968) found the professional staff of Connecticut schools influential in decisions made by their principals. Wendlandt (1970) found differing opinions by supervisors and staff about the degree of teacher involvement. One potential problem for this study will be to determine the extent to which teacher involvement varies from school to school and what effect this has.

Decision making has been linked with school climate (Adelson, 1972), (McEntire, 1975), (Davis, 1976); preferred teacher roles (Archambault, 1967), (Keef, 1976); characteristics of school principals (Inkpen, 1975); differing perspectives of principals and teachers (Bumbarger, 1966), (Chamberlain, 1975), (Chu, 1976); school building designs (Grant, 1977) and curriculum development (Sasse, 1966). Whilst it is not intended to draw conclusions from this wealth of evidence, the implications for this research are very clear: the processes of decision making must be embodied in any synoptic analysis of the functioning of the school.

EVIDENCE OF THE NOMOTHETIC DIMENSION: STUDY IMPLICATIONS

In the first chapter, the claim was made that there is need for an organizational analysis of the comprehensive secondary school. The evidence broadly classified as nomothetic shows a paucity of reference to the comprehensive school as such but a wealth of information about the devices of research suitable to incorporate in such a study. The analysis ought to give attention to the administrative procedures and the organizational structures, as many of the research projects described here have done. This study cannot ignore organizational climate as a factor but it has been suggested that this will not be a main theme. Formal testing of organizational climate was seen to have limitations in the complex secondary school and to have been exhaustively tested. Similarly, change and innovation will be noted where it is observed but not sought out for its own sake. On the other hand, reference to decision/policy making procedures and the involvement of staff in them must be regarded as essential to the study.

One other inescapable conclusion is that although they have been separated for convenience in this review, there is no hard and fast line between the two major strands of the study. Some of the research classified as nomothetic may equally have been included in the idiographic, and vice versa. Such confusion of definition only serves to underline the interpenetration of the two facets of organization.

IDIOGRAPHIC DIMENSION

Research on individuals within schools has been more extensive than examination of the schools as institutions. It is suspected that the determination of personal characteristics is a more clearcut exercise than the interpretation of institutional phenomena and this may account for the bias. Again, for convenience, research will be categorised under major headings, in this case, leadership, morale factors, professionalism, individual participation and personal characteristics.

Much of the research examined two or more of these variables and there is a good deal of overlap. Reference to specific investigations will not generally be described more than once in view of the extensive nature and availability of research into the idiographic dimension of the school organization.

1. LEADERSHIP

Leadership must be regarded as the most important personal role in the organization. In the school, the headmaster has long been recognised as the key figure in the success or failure of the institution. Others lead in the school, for example, the head of a subject department. At the same time, it must be recognised that leadership is only one of the roles of what is a minority of teachers.

School studies in leadership have been influenced by investigation into leadership generally, the work of such as Likert (1958) and Fiedler (1958) providing stimulus to the study. Such

general studies will not be examined here.

Throughout this writing, the terms "headmaster" and "principal" are regarded as synonymous. The former is generally used in English schools, the latter elsewhere. To be correct in describing the school leaders, both will be required. The respective terms are in disfavour in the country where they are not generally in use.

a) Leadership Styles

A number of studies have examined the role of the leader, either in descriptive format or in terms of style, supervision methods or effectiveness. The following are identified as being the most important.

(i) Willower (1960) looked at the style of leaders in relation to their perception of subordinates. The research attests to the useful theoretical distinction between nomothetic and idiographic aspects of leadership. In the nomothetic style, the leader expects subordinates to do things 'by the book' and subordinates must conform. In the idiographic style, the leader expects subordinates to work things out for themselves. It was confirmed that principals employing an idiographic leadership style tend to regard teachers as professionals to a greater extent than do principals employing a nomothetic style.

(ii) Gross and Herriott (1963) used a United States national sample to explore problems related to the Executive Professional Leadership (EPL) of elementary school principals. EPL was defined as "the efforts of an executive of a professionally staffed organization to conform to a definition of his role that stresses his obligation to improve the quality of staff performance".

Principals with high EPL were identified both by means of their own responses and teacher responses about principal behaviour. Where high EPL was evident, staff morale was shown to be high also and performance by staff and students was effective. The massive report on this particular study became something of a landmark in the field of principal leadership roles but few, if any, have tried to emulate the extensive research instrument of one hundred and ninety-two pages. Research into leadership roles inevitably compares findings with this opus.

(iii) Cohen (1969,1970) turned his attention to the leadership role as seen through the eyes of three hundred and forty-two English and Welsh headmasters. The study hoped to formulate a social-psychological map of the head teacher position from the point of view of the incumbents. Cohen constructed a Headteacher Role Definition Instrument and analysed the results in several ways. He found that the type and size of school was significantly related to the head teacher role. On the other hand, the location of the school was not seen to be a factor. Male head teachers were seen to have greater concern for role autonomy and stressing production emphasis than were their female counterparts, but male heads were not shown to be more authoritarian. Older heads, in fact, were seen as more paternalistic and it was younger rather than older heads who displayed the higher level of authoritarianism. In a phenomenological analysis of some of the evidence, the research concluded that the head teacher was seen as the occupant of a boundary position which served as a point of articulation between the internal and external systems of the school. In this section of the study, the conflict between teacher and parent expectations

was discussed.

(iv) Another English study of importance is that of Hughes (1972), who examined the role of the secondary school headmaster. Using theoretical concepts, it was deduced that the required role is to be both that of leading professional and chief executive. Hughes interviewed over three hundred heads in South Wales and South West England. He found considerable support for his hypothesis. Extensive interpenetration between the professional and bureaucratic systems was revealed. The study is useful for its implications for the training of headmasters in the role of professional-as-administrator.

(v) An interesting case study of a principal within the concepts of the cultural background of a school was made by Wolcott (1973). The study was descriptive rather than theoretical. The principal in question (of an elementary school in the Pacific North West of the United States) was shown to be a mediator rather than an innovator or commander. Wolcott is a cultural anthropologist, interested in how people resolve problems within a particular social setting. Ed Bell, the subject of the inquiry, walked a tightrope between conflicting pressures from teachers, parents and, to a lesser extent, students. His role was shown to be that of making compromises between competing viewpoints. Wolcott does not claim that his subject was necessarily typical but many of his readers will no doubt recognise the skill of arbitration as a necessary attribute for the successful principal.

b) Teacher Perceptions of the Leadership Role

Another set of studies has examined the way teachers view the leadership role. One study found that teachers expected

principals to concentrate on budgeting, co-ordinating and handling public relations rather than involvement in instructional leadership. This investigation showed that teachers tended to turn to colleagues for professional advice (Croft, 1968). Research by Blumberg and Amidon (1963,1965) showed that teachers expected to be supported and felt let down when the principal became defensive about his own behaviour instead. Staff morale was higher when staff meetings were staff centred rather than principal centred. Kunz (1973) claimed that principals who were strong on initiating structure had a wider zone of acceptance than those who were not. Teachers expected consideration from the principal, according to work done by Kokovich (1969). One interesting study found a considerable gap between perceptions of ideal and actual principal behaviour. Teachers did not see their principals as measuring up to ideal behaviour. A feature of this research was the demonstrated congruence between teacher and principal perceptions of ideal principal behaviour. In view of this, it could be concluded that principals fall far short of their own ideals of leadership behaviour (Notheis, 1975).

From the point of view of this study, sufficient evidence is available to indicate that teacher perception of the school principal must be considered.

c) Leadership and Morale Factors

A number of studies have examined the role of principal in terms of its effect upon the morale of the staff as a whole or the job satisfaction of individuals. As the interrelationship

this section is of considerable importance.

Levels of staff morale are obviously more difficult to determine than individual responses. In none of the studies to be cited was a simple direct relationship between leader behaviour and staff morale established. Walker (1975) found that when teachers regarded leader behaviour favourably morale tended to be higher. The study showed, however, that teachers placed more value on the personal or individual dimensions of their leader than they did on his behaviour as leader. Differences were found between the responses of teachers considered to be in the "low productive group" and those in the "high productive group". Morale, in the eyes of the former, was more directly related to leader behaviour than it was for the latter. The high productive group had noticeably higher levels of morale irrespective of leadership qualities. In general, the high productive teachers exhibited greater confidence in the sincerity and competence of their principals. One of the recommendations to come out of this research was that a conscious and concerted effort by the principal to improve his relationship with the low productive/low morale teacher could serve to enhance the morale of that teacher.

Wales (1971) found no significant relationship between the behaviour of the elementary school principal and the level of morale of his staff and claimed, importantly, that the level of teacher morale was a fluctuating phenomenon. Eisenberg (1976) also found no special affinity between principal behaviour and morale. He went a step further in adding that personal characteristics of the principal, such as age, sex or years of experience, did not affect morale. Another of his conclusions

was that principals were not skilled in recognising levels of staff morale but that where they were sensitive to fluctuations, teacher morale tended to be higher.

Rather more studies have examined leadership behaviour in relation to individual job satisfaction. Reference is made in some to the job satisfaction of the principals themselves, the results being largely equivocal. Carr (1971) and Schult (1976) are examples of research that found the principal's job satisfaction to be related to a number of particular dimensions without a clearcut conclusion about the job satisfaction of principals as such.

Most studies relate principal behaviour, characteristics and effectiveness to the job satisfaction of staff. As early as 1955, Bidwell demonstrated that teachers are satisfied when they perceive their administrator acting in accordance with their own role expectations and dissatisfied when their role expectation for the behaviour of the administrator diverges. According to this study, the level of teaching satisfaction is dependent upon the convergence and divergence of the perceived and the desired role expection of the teacher (Bidwell, 1955).

The conclusions drawn by more recent studies have tended to support this general conclusion, results indicating that the behaviour of the leader is one determinant of job satisfaction.

Miller (1973) found significant relationships between general job satisfaction and elementary teacher perception of the bases of social influence of their principal. Social influence accounted for 37% of the variance associated with extrinsic satisfaction but it accounted for only 10% of the intrinsic satisfaction. The author concluded that he had erred in not including

in his measure some aspect of teacher-student interaction which may have given more of an indication of the causes of intrinsic satisfaction.

Shin (1975) found that different types of teachers responded differently in terms of job satisfaction to differing styles of leadership. The extent to which the teacher's own needs were being met was more important in determining job satisfaction than any aspect of leadership behaviour.

Sidotti (1976) claimed that the principal's authority structure was a factor in determining job satisfaction. The data from his study suggests that principals who are seen by staff as exhibiting high informal authority will tend to have teachers who are more loyal, more satisfied with their jobs and who have a sense of authority themselves. Informal authority is the vital factor, the study supporting the assumption that the exercise of formal authority by the principal does not command the employee's willingness to devote his energies to performing his task to the best of his ability.

Hsieh (1976), in comparing the relationships between principals' leadership styles and teacher job satisfaction in the Republic of China and the State of Iowa, found that in both locations there was a correlation between personal leadership dimensions and all aspects of job satisfaction. Where teachers perceived their principal's behaviour to be high in terms of consideration and initiating structure, the research found a tendency for staff to have better levels of job satisfaction.

This group of studies stresses the importance of morale

factors from the standpoint of organizational effectiveness. Any examination of the relationship between teachers and their school must take into account the attitude of the teachers towards their particular work circumstances.

d) Personal Characteristics of Leaders

In the footsteps of early studies of leadership, a number of investigations have looked at traits of leaders to try to determine what makes a good leader, more specifically, a good headmaster. Such investigations are seen as peripheral to the analysis of a school but should be looked at briefly to see where relevance can be established.

Lipham (1960) tried to determine personality traits relevant to the role of principal. He found that the effective principal was inclined to engage in strong and purposeful activity, was keen on achievement, was often pursuing further study himself and stressing better job performance. The effective principal possessed greater emotional control than his ineffective counterparts.

Blumberg (1968) concluded that behavioural styles significantly influenced the interpersonal relationships between teachers and their supervisors. Individual leader characteristics were determinants of the way an organization operated.

Cohen (1971) discounted the belief that older heads were more traditional and less innovative, less concerned with supervision and more authoritarian than their younger colleagues. The research showed them to be no more traditional in outlook than their junior cohorts.

A substantial scrutiny of other research on this theme failed to show that the trait theory was any more applicable to school principals than it had been to other forms of leadership. The evidence is conflicting and supportive of the general contention that the leader's effectiveness is determined by a combination of factors, not personality alone.

e) Leadership and Other Variables

Of studies in leadership not so far covered, several which have scrutinised the relationships between leadership and other aspects of school organization are worthy of note.

(i) Ambrosie and Heller (1972) examined the personality characteristics of the principal and teacher participation in the decision process. Thirty-eight high school principals and two hundred and thirty-seven of their staff from eight county areas in New York took part in the study. A significant correlation was found between principal leadership style and perceived teacher decision making. The study concluded that teachers regarded principal behaviour as highly important in determining organizational functioning.

(ii) Berg (1973) examined the impact of collective bargaining upon the behaviour of the principal. As may have been anticipated, the principal exposed to significant staff pressure was seen as undergoing behaviour modification and finding himself subject to some role ambiguity and status anxiety.

(iii) Ferraro (1976) examined the orientation of one hundred and fifty secondary school principals in the State of New Jersey

towards interpersonal interaction, manipulative techniques, curricular change and shared decision making. The major findings of the study demonstrated no consistent pattern between the responses of altruistic and manipulative principals with respect to any of the other variables. Curricular change was seen to be more a feature of organizational pattern than of leadership behaviour.

LEADERSHIP AS AN ASPECT OF THIS STUDY

This brief summary of leadership research has demonstrated the vital role of leaders within schools. The principal emerges as a dominating influence over administrative functioning. An organizational analysis must refer to the role of the headmaster even if the inquiry is not to be into leadership as such.

2. MORALE FACTORS

The centrality of morale to an analysis of organizational functioning has already been noted. Various morale factors within schools have been investigated and some discussed already. When looking at the finer detail a distinction needs to be drawn between morale, job satisfaction and personal needs satisfaction. Morale is generally seen in its situational context as a joint staff reaction to circumstances. Job satisfaction and personal needs satisfaction, as the terms imply, relate to individual responses to the organization. From an idiographic viewpoint, the last two are more pertinent: morale tends to belong to the nomothetic perspective. Because of the interrelationship of the three, all will be discussed here.

a) Staff Morale

Some of the investigation into teacher morale appeared in the 1950's and the topic was extensively researched through the 1960's. Anderson (1953) demonstrated a link between teacher morale and student performance and concluded that high teacher morale was a helpful ingredient in obtaining good results. Guba (1958) compared morale and satisfaction. The study demonstrated that time is a critical variable, that past experiences predispose the individual towards satisfactory experiences in a new situation, and that high satisfaction ordinarily precedes high morale. The amount of energy the individual is willing and able to expend is another contributory factor towards satisfaction and morale.

Redefer (1959) obtained a number of generalisations from a study of five thousand teachers in twenty-four school systems. Concluding that it is important to improve and maintain the morale status of teachers, he was able, through his study, to test thirty-two positive morale tendencies and twenty-nine negative tendencies. The study advocated action to improve the morale of teachers. Suehr (1961) investigated morale in the public schools of Boulder, Colorado, and from this was able to list factors which appeared more commonly in teachers of high and low morale. Although the results appear simplistic, the study stressed the value of monitoring morale with a view to stimulating improvement when this seemed necessary. Richardson and Blocker (1963,1966) conducted a factor analysis of faculty attitude in a college setting and confirmed the existence of differential, reasonably unique categories or dimensions of morale.

By 1963, Davis and others were in a position to summarise a sizeable body of research into teacher morale and from the evidence

to make six major conclusions. Among the more important of these were that morale is a function of a multitude of interrelated variables rather than one isolated variable or more, that the immediate supervisor is extremely important to teacher morale and that congruence between school boards and teachers in terms of perceptions and expectations is essential (Davis, Ware, Shapiro, Donald and Stieber, 1963).

In Australia, Smith (1966,1976,1978) validated his instrument, the Staff Morale Questionnaire (SMQ), a model that led to further investigation. Smith demonstrated the extent to which leadership and confidence in the leadership are vital factors in the development of staff morale, and the importance of the teacher's sense of power. The SMQ has been widely used.

Reference to the work of Bentley and Remple is important. Because they contended that morale is multi-dimensional they used a factor analysis approach with forty-five separate items in their instrument. Research supported the contention that morale is many-faceted, influenced by a variety of personal and situational factors with significant differences found to exist in respect of such characteristics as sex, age, teaching experience, and professional preparation. The conclusions of this research have been duplicated many times and the contribution of the two writers is not so much vested in these as in the influence of their document, the Purdue Teacher Opinionnaire, which is one of the major investigative tools into school climate generally (Remple and Bentley, 1964; Bentley and Remple, 1970).

b) <u>Job Satisfaction</u>

Research into job satisfaction has been extensive indeed. What seem to be the most important will be outlined here.

As early as 1951, Chase had examined those factors which led to satisfaction in teaching. One thousand, seven hundred and eighty-four teachers in two hundred systems in forty-three states in America responded to his questionnaire and the subsequent research provided evidence of the extent to which satisfaction was related to personal characteristics of teachers and to administrative policies and practices. Among the personal factors seen to improve satisfaction were the number of years of teaching experience and length of service in the system, marriage, salary increases and being female. Democratic leadership was shown to increase satisfaction and, indeed, leadership was rated high as a morale factor. Freedom to plan, good working conditions, professional responsibility, a teacher voice in policy making, good salaries, a supportive community and redress of grievances were all seen as factors contributing to higher levels of job satisfaction (Chase, 1951,1953).

Blai (1964) sought to develop an instrument that might be used to measure job satisfaction in terms of personal needs satisfaction. This investigation sought experimental evidence for Maslow's hierarchy of needs since it was hypothesised that the greater the needs satisfaction, the greater would be the job satisfaction. The evidence of the research was that professional groups such as teachers are more concerned with self-actualisation, interesting duties and advancement, whilst the clerical/trade/public service group are more concerned with job security, esteem and congeniality. A major conclusion was that those who aspire to

or achieve different types of employment have differing needs, a fact that might be useful for prediction in vocational counselling.

Sergiovanni (1966,1967) carried out his doctoral investigation into factors which affect job satisfaction and job dissatisfaction amongst teachers. The initial study was to test some earlier findings by Herzberg with respect to teachers, The study concluded that achievement, recognition and responsibility were factors which contributed predominantly to teacher satisfaction, whilst interpersonal relations, technical supervision, the imposition of policy by administration, unfairness, status and personal life were factors which contributed predominantly to teacher dissatisfaction. The satisfaction factors tended to be related to the work itself and the dissatisfaction factors tended to focus on the conditions of work. The results thus support substantially the two-factor theory by Herzberg. There was little support for the then held view that factors which satisfy and those which dissatisfy were arranged on a conceptual continuum. Sergiovanni extended his interest in this area in further studies with Trusty. The perceived need deficiencies of teacher and administrators were examined. It appeared that age, sex and professional role were significantly related to the perception of need deficiencies (Trusty and Sergiovanni, 1966).

Coughlan (1970,1970a,1970b) examined the ways in which teacher work value affected job satisfaction within relatively closed and open schools. The findings suggest that these different types of formal organization generated patterns of work attitude which were related more to type of system than to the disparate work values of teachers. Three types of teacher were identified;

the professionals, the organizationals and the socials, and the resultant relationships became too complex for simple conclusions. The researcher hypothesised that the extent of job independence and autonomy given to teachers in a closed system may be crucial since, in the relatively open school organizational system, teachers were significantly more satisfied with their system administration, their instructional programme and their financial incentives. On the other hand, the focus of concern was on horizontal relations. These colleague relations were not a problem in the closed schools but the other factors were. The research does not say that the open school system was more likely to afford teacher satisfaction in a greater number of areas, but the implication was there.

A similar study was carried out by Carpenter (1971). Schools were categorised as being tall, medium or flat in organizational structure and the possible effects of this structure pattern on the job satisfaction of teachers examined. Teacher job perceptions varied throughout all types of schools. A significant conclusion was that teachers in flat organizations perceived higher job satisfaction than their counterparts in tall and medium organizations in the areas of community prestige, professional authority and participation in policy making. The research found that the more administrative levels existing between higher administrative positions and teaching positions, the more these positions were perceived by the incumbents as restrictive, regimented and formalised.

Grassie and Carss (1973) also examined relationships between school structure and teacher satisfaction. Their particular study involved other variables; leadership quality and the

professional orientation of teachers. Simply stated, the study assumed that teachers had different orientations to their occupation and different perceptions of school structure. These were merged in the teaching experience and resulted in either satisfaction or dissatisfaction. The study was carried out in high schools in the Brisbane area (Australia) with five hundred and seventy-four teacher respondents completing five questionnaires designed to determine personal data of respondents, professionalism, organizational climate, bureaucracy and satisfaction. Unravelling these relationships involved examining two groups of respondents, those with a strong belief in the importance of a theoretical base to teaching, a so-called **high level** group, and those who saw teaching as a fairly mechanical skill, one learned on the job, a so-called **low level** group. Were there differences between the high level and low level groups? Some of the conclusions were as follows:

(i) For both groups, satisfaction with work and with colleagues correlated positively with leadership quality and negatively with hierarchy of authority.

(ii) The high level group expected to be involved in decision making and in school policy matters. If these qualities were seen to be present, the teachers tended to be satisfied. Such teachers were inclined to become increasingly dissatisfied as both hierarchy of authority and organizational restraint were emphasised.

(iii) The low level group found teaching a chore which they carried out in a routine manner without deriving satisfaction from it. The sources of their satisfaction

were elsewhere and the presence of such a group within schools represented a challenge to administrators.

What was revealed was a paradoxical situation in which attempts to increase the satisfaction of the high level group could diminish the satisfaction of the low level group, since one desired participation in professional decisions and the other did not.

(c) Personal Needs Satisfaction

There is a very fine line between job satisfaction and personal needs satisfaction, the latter owing its emphasis to the psychological approach and, in particular, Maslow's concept of a hierarchy of needs. There is a distinction between satisfaction with the job and personal fulfilment within the job but few have attempted to differentiate between these.

Perhaps the most important researcher to make this distinction was Porter (1961,1961a,1963,1963a). He found that people at different levels in the management structure varied as to the Maslow-specified satisfaction plane to which they aspired. Security and social needs were more important to those lower in the hierarchy, autonomy and self-actualisation to the higher officials. Porter found a high correlation between the ranks and traits selected by bottom management and middle management. His research was very widespread, involving some two thousand respondents. Importantly, it resulted in a test instrument which has further applications.

Dunkin (1968) looked at the need structure of teachers related to their experience and their job satisfaction. One hundred

and twenty Queensland teachers provided the basis of the study. The data suggested that teaching was likely to be attractive to those who had low achievement needs and high deference needs. The researcher was concerned that his evidence suggested that conformity rather than originality was encouraged in Australian teachers.

Brown (1970) looked at the needs satisfaction of educational administrators. The research attempted to establish whether higher level administrators received higher satisfaction from their positions than lower level administrators. Again, Maslow's hierarchy formed the basis. It was determined that in general, the higher level administrators received greater satisfaction from their positions than lower level adminstrators. The difference was not a step-stair relationship, however, but rather there was a split between those at the top and those at the bottom with respect to personal needs satisfaction.

Catherwood (1973) also examined the relationships between hierarchical position and the needs satisfaction of teachers. Significant differences were found among groups. Individual needs satisfaction tended to increase with position, age, experience and status. The lower orders needed safety and security whilst the higher needed esteem and self-actualisation. School administrators (principals and superintendents) consistently perceived themselves as being more satisfied than did teachers and supervisors.

Leatherwood (1973) investigated factors affecting the morale and needs satisfaction of selected team teachers in North Carolina. It was discovered that there was a considerable difference

in morale and needs satisfaction between those teachers who had planning time and those who did not. Of all the other factors pursued (such as the type of leadership the teams used, who selected the team membership, those in open space versus self-contained classrooms) no significant differences were found.

Saluzzi (1976) compared the personal needs satisfaction of teachers in Individually Guided Education (IGE) programmes and those in conventionally organized schools. Utilising the Maslow hierarchy, the research found no differences in the perceptions of any of the teachers of the importance they attached to security, social, esteem and autonomy needs. On the other hand, teachers in the IGE schools attached greater importance to the need for self-actualisation than did teachers employed in the conventional schools. Teachers in the latter were more gratified with respect to their security than those working under the multi-unit plan. Finally, teachers in both types of school perceived no differences in the way in which the two programmes catered for the needs satisfaction of the pupils.

Chisholm (1976) explored need achievement and need fulfilment deficiencies as they affected the promotional aspirations of educators. Among the instruments used in this study was the Porter Needs Satisfaction Questionnaire for the purpose of measuring need fulfilment deficiency. The research found that as career aspirations increased, the need for achievement increased, that as career aspirations grew, their need for fulfilment deficiency decreased, that female educators were lower in career aspirations than males, and that teachers with longer experience had higher career aspirations than those with fewer years.

MORALE FACTORS AS AN ASPECT OF THIS STUDY

Morale factors are specifically related to two of the eight questions posed in Chapter 1. Their significance in determining teacher attitude to their school is paramount. The implication of all the studies reported is that high levels of morale, of job satisfaction and personal needs satisfaction are desirable, that the organization functions more effectively when a high morale component obtains.

The only question to be decided when the research is designed is how morale variables will be ascertained.

3. PROFESSIONALISM

Professionalism is an individual characteristic of attitude to the work rather than the institution. A number of studies have either investigated it as a phenomenon or used it as a variable. Again, the selection of research reviewed will be those that appear the most important of a very large number.

Studies of teacher professionalism came of age with the extensive research of Corwin (1963,1965,1969,1970). Corwin, a leader in educational administration, had made this area of investigation his major field of research. His test instrument, the Professional Role Orientation Scale, is the prime research tool for the investigation of this variable. In his studies, he looked at conflict among professional educators, both conflict between teachers and their administrators and between the professional and employee roles of teachers. The general thesis was that professionalism is a militant process by which a vocation attempts to gain control over its work. Militancy is likely to

be particularly evident in bureaucratic systems where work is regulated by centralised decision making authorities. This study confirmed that teachers who are predisposed towards taking initiative in professional matters subscribe to more professional and less bureaucratic roles and have higher rates of overt conflict. Teachers who endorse professional roles were seen as especially militant. Corwin concluded that professionalisation is a drive for status and that an emerging profession such as teaching must achieve greater authority over the policies that govern its work; hence the bureaucratic-professional role conflict. Apart from the significance of his own studies, the Professional Role Orientation Scale was shown to be a particularly effective instrument for polarising teachers on the professional/non-professional continuum and thus a main reason for subsequent use of the instrument in later research studies.

One of those to use the Corwin scale was Hrynyk (1966). In a study in which data was obtained from one thousand, one hundred and sixty-two Alberta teachers, Hyrnyk found positive relationships between scores on the scale and the size of school staff, status positions and participation in the affairs of the Alberta Teachers' Association. The study concluded that there was evidence of maturing professional attitudes among teachers. This supported the conclusions of another Alberta study (Ingram, 1965) which had found noticeable differences in the professional role orientation of educational sub-groups.

The other major measuring device indicating professionalism has been the Executive Professional Leadership aspect of the lengthy instrument of Gross and Herriott (1965). The research of Hughes

(1972), which characterised the English and Welsh headmasters as Chief Executive and Leading Professional, used this device as the basis for analysis of the professional role. Hughes' findings led him to conclude that the increasing professionalism of staff confirms the likelihood of continuing pressure from staff for greater involvement in school decision making.

Another study employing the Gross and Herriott scale is that of Lichtenfeld (1977), whose investigations found very little difference in the levels of executive professional leadership of principals of public and independent schools and concluded that separate administrative or training programmes were not appropriate for leaders of these two types of institution.

Some researchers such as Davidson (1975) have devised their own instrumentation for the measurement of professionalism. This study selected six professional teacher characteristics, one of which (involvement and participation in policy making) is particularly relevant to this current investigation. The study showed that teachers generally find themselves deprived of participation at the desired level.

A number of studies have looked at professionalism as a variable measured in its relationships to other characteristics.

Colombotus (1961) examined the sources of professionalism, considering the effects of socialisation and experience in the job on professionalism, and the consequence of professionalism on three aspects of organizational performance: job effectiveness, proceduralism and overtime. The sample was five hundred and forty-five secondary teachers in the American Mid West. The author used his own device to differentiate between high professionals and

low professionals and concluded that women teachers were more professionally orientated than men even although men tended to behave more professionally, that a middle class background produced professionalism and that professionalism had a strong positive influence on job effectiveness but no significant effect on proceduralism or overtime.

Paul (1972) examined organizational structure and professional autonomy. This was a comparative study involving teacher-authority conflict in Montreal and Outer London. The author made a distinction between professional aspects, the interna and employee aspects, the externa of the school, hypothesising that teacher authority conflict could be minimised by emphasising professional autonomy in the interna and bureaucratic authority in the externa. English teachers were found to have less conflict in professional aspects than Canadian teachers. For this reason, Canadian teachers displayed a greater desire for autonomy. Despite the opposition in both countries to larger schools, the research showed less conflict in the larger establishments.

Paffenroth (1974) examined the relationships between the values of teachers and principals, their involvement in the decision making process and their attitudes towards education. The survey was carried out in sixteen schools in the Wisconsin area. There were eleven major findings of which the more relevant appear to be the following:

(a) the degree to which teachers perceived themselves to be involved in the decision process was not related to their expressed values;

(b) their attitude towards education (their profess-

ionalism) was closely aligned to their expressed values;

(c) teachers involved in the decision process had greater job satisfaction.

This particular study appears to leave a number of unanswered questions but shows the importance of establishing a relationship between professionalism and degree of involvement.

Lusthaus (1974) examined the relationship between the organizational structure of schools and the role conflict of teachers. This study embraced a number of personal characteristics, including professionalism, which was measured by means of the writer's own instrument. The proposition that organizational structure of schools does affect the role conflict of teachers was generally supported. The degree of professionalism was found to be significantly associated with both perceived and experienced role conflict and this was the only personal variable found to have this result. A professional attitude by a teacher frequently led him into direct conflict with the organizational structure of his school.

Deem (1976) looked at the question of professionalism related to militant action of teachers from the English Midlands. The study concluded that militancy and professionalism do co-exist amongst teachers and that acceptance of the latter does not mean rejection of the former, since many argued that one tenet of a profession is power to control.

PROFESSIONALISM AS AN ASPECT OF THIS STUDY

Research into professionalism confirms that the topic

gives a useful perspective on the individual. The evidence tends to be ambivalent, suggesting that this is an attitude factor over which the place of work may have very little control.

If, in designing the research, an independent personal factor is a requirement, this may prove a convenient variable. One question of some relevance which it may be possible to determine is whether the institution does influence the level of professionalism of the teachers who work in it.

4. INDIVIDUAL PARTICIPATION

Looking at the extent to which the teacher participates in the organization, particularly with respect to policy/decision making, has also been a major research task. Such investigation has been aimed at determining not only the extent to which teachers do participate in schools but the degree to which they desire to be involved. As with other aspects of research into educational administration, leaders in the field have emerged, although it was the early 1970's before this occurred with respect to decisional participation.

As early as 1952, Chase had concluded that participation in policy making affected teacher morale, that teachers who participated in making policies were more likely to be enthusiastic about their schools than those who did not and that school systems where morale was high were likely to be characterised by situations in which they were involved in a share of the policy making process (Chase, 1952).

Vroom, the organizational psychologist, carried out his doctoral research in the same field of inquiry. His aim was

to investigate environmental and personality determinants of behaviour simultaneously. Most of his six hypotheses included the aspect of participation in decision making. Whilst the experiment did not involve a school setting, his subjects being one hundred and eight supervisors in a large delivery service business, his conclusions are relevant and important. They confirmed that participation in decision making has positive effects on attitudes and motivation. Despite this, the study warned that any explanation of the effects of participation needs to be considered in relation to the personality of the participant. Vroom related participation to attitude, participation to motivation and arrived at the general conclusion that the effects of participation in decision making depend upon certain personality characteristics of the participant (Vroom, 1958,1959).

Throughout the 1960's and 1970's a steady stream of experiments examined participation by teachers. Moeller (1962) found that teachers in bureaucratic schools had a higher sense of power than teachers in less bureaucratic school settings. Leiman (1961) concluded that teachers who participate in school administration have higher morale than other teachers, more positive attitudes towards others in the school and a higher regard for the teaching profession. Bridges (1964) developed an index of participation but did not find that higher levels of participation engendered a more favourable attitude towards the principals. He concluded that school size and the age and experience of the principals were equally important as factors determining teacher attitude. McNamara and Enns (1966) looked at directive leadership by the principal and found that this style was acceptable but

that it did not work well when the principal's leadership was not favourably viewed. Berck (1967) related consensus and involvement to teacher job satisfaction and concluded that there was a positive relationship between involvement and job satisfaction. Gorton (1971) looked at the principal's orientation towards participation by staff and concluded that there were advantages in schools where participation was encouraged. Battles (1971) related involvement and feelings of powerlessness in teachers. The study concluded that involved teachers felt a greater sense of power and that their involvement in determining school policy is of crucial importance.

One investigation deserves more than such a passing glance. Reference has already been made to the Decisional Participation Scale of Belasco and Alutto. Decisional participation is defined as the discrepancy between current and preferred levels of participation. The authors found significant systematic relationships between individual satisfaction levels of teachers and the state of decisional participation. Teachers with low satisfaction possess the highest levels of decisional deprivation. Because satisfaction levels were not uniform (the most satisfied teachers tending to be older, female elementary teachers), they concluded that a decisional participation approach would have a varying impact on different strata of the teaching population (Belasco and Alutto, 1972). In subsequent articles, the concepts of decisional deprivation, equilibrium and saturation were developed. These categories represent the extent to which perceived participation corresponds with desired participation. Where the two were approximately equal, equilibrium obtained and this was

the most satisfactory solution. The research showed that individuals in various categories classified by age, sex, teaching experience, status and attitude, desired differing levels of participation and that it was not valid to make universal conclusions about the optimum levels of involvement in decision making. The data was gathered from four hundred and fifty-four New York State teachers and, apart from the conclusions already stated, showed that saturated teachers tended to be those of long tenure, the deprived tended to be young males and those in equilibrium tended to be middle-aged females. Another significant result was the conclusion that deprived individuals exhibit greater attitudinal militancy than the equal or saturated (Alutto and Belasco, 1971,1972,1973).

LEVELS OF PARTICIPATION AS AN ASPECT OF THIS STUDY

There is sufficient evidence to demonstrate that the level of teacher involvement, particularly when related to the desired level of teacher involvement in the policy/decision process, is a valuable indicator of organizational mechanics.

When designing the experiment, cognizance should be given to the extent to which comprehensive secondary schools give teachers the opportunity to be involved to their desired level.

5. PERSONAL CHARACTERISTICS

The personal characteristics of participants are generally considered in any piece of research into organizational dynamics, in some cases as the prime variable. A small sample of research not classified under previous headings will be described in this final section of the review.

Franks (1963) related morale to selected personal factors. The sample was a group of two hundred and seventy-eight elementary teachers and sixteen principals from three school districts in Oklahoma who were subjected to a battery of test instruments. Teachers were categorised into high or low morale groups which were then compared with regard to personal variables. The research concluded that morale relates to teachers' ages, the age difference between them and their principal, the extent of their experience with their principal, the degree of closed-mindedness, the perceptions of the morale level of their colleagues. Morale did not seem to be related to their sex, the extent of their teaching experience, the status they hold, the level of professional preparation or their personality traits.

Maas (1969) compared specified characteristics of teachers with job satisfaction and dissatisfaction. The study found that personal characteristics associated with promotion, recognition, employee benefits, home life and school district policy were sex, age and income level and that there was an association between these personal variables and teachers' perceptions of these factors of job satisfaction.

Lynch (1973) investigated the attitudes of "progressive" school teachers as measured by their participation in ten progressive schools in the United Kingdom. His conclusions were that progressive teachers tended to be more tender minded, naturalistic and radical in a political sense. As a sideline to this particular study, the author concluded that the State system had become more progressive in attitude as a result of the impact of progressive schools.

PERSONAL CHARACTERISTICS AS AN ASPECT OF THIS STUDY

The section of research outlined above is in reality a miscellaneous collection of leftover inquiries which have not been otherwise classified. The reason for the small number is that every research exercise looks closely at its subject and asks such questions as, "What differences are apparent by virtue of sex, age, status?", and so on. Personal characteristics of respondents has been part of all the research cited in this chapter.

It follows that personal characteristics of teachers is a relevant factor to the idiographic dimension of this current study.

EMERGENT THEMES FOR AN ORGANIZATIONAL ANALYSIS

The purpose of this review of literature and research has been to identify the essential ingredients for an organizational analysis of the comprehensive secondary school.

The chapter began by outlining organization theory as such. This section showed that systematic study in the field has, from its earliest beginnings, recognised and developed two interwoven and interdependent aspects. These two strands of organizational dynamics are the essential starting point for any coherent investigation hoping to cover the whole spectrum of an organization.

After the introductory section the summary concentrated on educational administration, revealing what has been included in the study in the last three decades. The theory indicated that the areas of serious investigation have been the roles of the organization, particularly leadership and supervision, the

professionalism of the role incumbents, their interpersonal behaviour and the dynamics of administration, particularly during times of change and innovation.

The research of educational administration was classified broadly under the two headings of institutional (nomothetic) dimension and personal (idiographic) dimension to coincide with the two identified parts of a functioning institution.

Research into the nomothetic dimension has shown that institutions have been examined from the perspectives of administrative and organizational structures, climate, innovation and change and policy/decision making. Similar studies emphasising the idiographic perspective have examined leadership, morale factors, professionalism, invididual participation and personal characteristics of participants.

From all of these studies the types of findings emerging have been indicated. In many cases they have been consistent, in some contradictory and in others equivocal. They have emphasised the underlying complexity of organizational analysis.

The claim made is that this comprehensive review has enabled the administrative and functioning features of the school to be identified.

The task of the research model with respect to the comprehensive secondary school is to find the means of analysing these component parts and then to assemble them.

CHAPTER 3

THE SETTING FOR THE STUDY AND OTHER BACKGROUND MATERIAL

In addition to locating the main areas to be incorporated in an organizational analysis it is necessary to have other background information about the institution to be examined. The comprehensive secondary school is a recent addition to the education spectrum, differing from the specialist secondary school in its attempt to provide programmes suited to the needs of students of all abilities and interests.

The purpose of this chapter is to identify some of the background relevant to the schools of the study. Such questions as how they evolved, what their aims and objectives are and what their main areas of operations are, must all contribute to the research finally designed.

THE SETTING

This study is about the comprehensive school as a type. A single school, as in a case study, will not do: the laboratory must be a representative sample of schools. The sample must be large enough to ensure that the possibility of findings being regarded as biased will not arise. In the same way, there must be a sufficient number of teacher responses to justify making general conclusions about staff.

The circumstances of the researcher provided access to schools near Bath in England and Perth in Western Australia.

These regions could furnish a cross-section of comprehensive schools with the possibility of a comparative element being built into the study. Even if not considered a major feature, comparisons would provide another dimension and perhaps prove particularly valuable to the Education Department of Western Australia, which had provided some sponsorship for the inquiry.

The evolution and major influences of comprehensive schools in England and Western Australia are outlined briefly below.

1. ENGLAND

The 1944 Education Act (from which all modern amendments stem) provided legitimisation for Local Education Authorities, determined that each secondary school would come under the supervision of a local Board of Governors, specified that schools were to cater for varieties of abilities and aptitudes, stated that pupils were to be educated according to the wishes of their parents and allowed a wide range of controlled, aided and independent schools (His Majesty's Stationery Office, 1944).

Local Education Authorities, widely influenced by the Norwood Report (1943), favoured the tripartite organization of schools but, as early as 1947, the Minister for Education (Circular 144) made it clear that a wide spectrum of organizational approaches was to be encouraged. No one form of secondary school organization was prescribed.

Since then there has emerged an ideological struggle that has kept educational debate to the forefront of national issues. A series of circulars entitled "The Organization of

Secondary Education" (issued by the Department of Education and Science, Numbers 10/65.10/70,4/74) have referred to the intentions of the government of the day with respect to the further development of comprehensive schools.

The 1965 Labour Government intended that selection at eleven plus and separation in secondary education were to be eliminated by reorganization on comprehensive lines. The 1970 Conservative Government withdrew this edict but the next Labour Government, on returning to power in 1974, reinstituted their former policy and went further towards guaranteeing its likely overall implementation by withdrawing assistance to direct grant grammar schools refusing to become comprehensive (Department of Education and Science, 7/75). The Education Act of 1976 (November 1976) required Local Education Authorities to have regard for the principle that (with certain specified exceptions) education was to be provided only in schools where the arrangements for admission were not based on selection by reference to ability and aptitude.

Parallel developments have occurred with respect to the examination system which has for so long dominated secondary schools in England. Whilst the traditional examinations remain, they have become supplemented by alternatives. Both the Crowther Report (1959) and the Newson Report (1963) paved the way for assessment of extended courses. The Certificate of Secondary Education provides an alternative to the General Certificate of Education for less able pupils, with a similar alternative for the Higher School Certificate proposed. This so-called Certificate of Extended Education was in use in a number of sixth form schools

by 1977. Under the arrangements for the new examinations, schools have ample latitude for the selection of courses and, with the so-called "Mode 3" arrangements, the right to determine the syllabuses to be taught. These developments have enabled schools to meet the needs of the increased numbers being retained by a leaving age raised to sixteen years. They have also enabled them to have a greater say in the determination of their curriculum.

2. WESTERN AUSTRALIA

Western Australian schools appear to have less opportunity for diversity. The Education Department, as the only authority, directly controls all State schools and is legally required to inspect and, if necessary, close independent schools not deemed to be efficient.

The establishment of a comprehensive system of secondary education was achieved without any major controversy. In the early post-war years, the demand for secondary places increased dramatically so that the existing system was unable to cope. The comparatively small number of schools already functioning were absorbed into a rapidly expanding system. In December 1958 it was declared that high schools henceforth would be "co-educational, comprehensive, community high schools" (Education Department of Western Australia, 1958). The one select-entry State secondary school was phased out with barely a ripple of protest and the framework for a comprehensive system established forthwith.

As in England, school programmes have been dominated by the requirements of external examinations which were also to prove unsuitable for the large numbers of lower ability pupils

increasingly evident in the senior classes. This aspect of burgeoning numbers and changing retention rates was the concern of several select committees (1952-1954,1957-1958,1962-1963), the work of which culminated in a major report (Dettman, 1969a). This report and its enabling legislation were to change the face of secondary education in Western Australia. External examinations were to be abolished and replaced by school assessment to be externally moderated by an independent board established for that purpose. The abolition of the intermediate level (Year Ten) Junior Certificate and its replacement by an "Achievment Certificate" were quickly accomplished, the first certificates being issued in 1972. The removal of external examinations at the level of tertiary entrance has so far (August 1982) proved to be impossible because of reluctance on the part of tertiary institutions to accept new arrangements. As a result, tertiary bodies still control the subjects and syllabuses relevant for admission. More pertinently, they effectively dictate the subjects taken by most students whether or not they are seeking tertiary entrance. A solution to this impasse is still urgently needed.

The Dettman Report prescribes the core subjects that must be taken by all students up to the end of Year Ten, the final year of compulsory attendance, but it allows a particularly wide range of option studies. The new Certificate thus paved the way for considerable change within schools. Like their English counterparts, Western Australian schools have ample scope for curriculum diversity.

SCHOOL OPERATION

Initial investigations were undertaken with a view to determining the aims and objectives of schools and identifying the main areas of operation. There were three primary sources of information: a preliminary investigation, the evidence of the literature and school brochures. From this material a conceptual model of the objectives and policy areas of the school was devised. The derivatives of the model were as follows:

1) PRELIMINARY INVESTIGATION

Between October 1976 and March 1977, twenty-four English schools were visited. These were located as far north as Leicester, south to Southampton, west to Dartington (in Devon) and east to Ely (Cambridgeshire). Schools were chosen after advice and on the basis of their variety and their excellence in terms of the type they represented. Table 1 summarises the types of schools included in the survey.

	Age Group	
8 Mixed comprehensive schools	four	11-16
	three	11-18
	one	13-18
1 Boys' comprehensive school		11-18
3 Select entry grammar schools		11-18
4 Secondary modern schools		11-16
1 "Traditional" independent school		13-18
1 "Progressive" independent school		13-18
1 Comprehensive middle school		9-13
3 Sixth form colleges		16+
1 Agricultural technical school		11-16
1 Technical grammar school		11-18

Table 1: Summary of Types of Schools included in the Preliminary Survey

At thirteen of these schools it was possible to conduct interviews with the headmasters, whilst at the remainder, informal discussions and observations were made. In the interview situation the same series of questions was posed. These were questions on procedures relating to curriculum innovation, class excursions, teacher in-service training, problems with teachers, the disruptive child, post-compulsory courses, changes proposed by staff, changes proposed by headmasters, the effect of headmaster opposition to proposed change and student government. From a summary of the responses, together with observations, it was possible to reach the impressions which follow.

(a) Curriculum

Some form of curriculum innovation was possible in most schools. Ten out of thirteen interviewed were able to quote examples of internally constructed or modified syllabuses in use. The schools least likely to design their own courses were those grammar schools limited to General Certificate of Education and A Level Examinations. Mode 3 Certificate of Education courses were in use in almost all of the comprehensive and secondary modern schools. Sixth form colleges offered a wide variety of courses, some of which were of the Mode 3 type. One of the colleges had unilaterally accepted the proposals for a Certificate of Extended Education (CEE) and was offering a qualification not officially validated by the Schools Council. Most comprehensive schools had either a Director of Studies or a permanent curriculum committee.

(b) Staff Development

Schools appeared to pay more than lip service to the ideal of encouraging the professional development of teaching

staff. All thirteen interviewed heads were able to give specific examples of staff involvement in in-service courses. In particular, examples of internal in-service training were evident in the comprehensive schools and sixth form colleges. Staff in such institutions appeared to be widely involved in consultation, in committees involving professional decisions and in discussion. In some schools there was a formal plan for staff development and in most a formal supervision of junior staff by seniors was practised.

(c) Welfare Organization

Every school visited had a formal pastoral structure although the form and apparent effectiveness varied. Of the interviewed schools, four had vertical groupings typified by the House system, five had horizontal groupings (either a Year system or a tiered upper, middle, lower scheme), two had "school" systems, one had an individual tutor system and a purpose-built comprehensive broke its school up into sub-school units based on the one hundred and twenty pupils in each open plan area. The pastoral system was universally supported by individual tutors who provided the initial pastoral support. This support was also backed up by a hierarchy of senior staff specifically allocated areas of welfare responsibility. (This provision did not apply in the grammar schools of the sample.)

(d) Class Organization

Schools must decide whether or not children should be ability grouped in the junior classes. (The problem does not arise in senior classes where subject selection is based on interest and proven ability.) Of the thirteen schools in the interview

sample, five had streaming by definition or nature, the three select-entry grammar schools (where high ability level pupils were further streamed) and the two sixth form colleges. The remaining eight schools made a variety of arrangements.

Two comprehensive schools and one traditional independent school ranked their pupils in most subjects.

The progressive independent school, with a maximum class size of fifteen, arranged pupils in mixed ability classes. This school aimed for individual tuition.

Three comprehensive schools placed pupils in ability ranked classes for mathematics and languages only.

One comprehensive school arranged classes in three broad ability bands. (Although not included in the survey, this was at the time the typical interpretation in Western Australia of the requirements of the lower school Achievement Certificate).

There was general agreement amongst teachers that this is a particularly important area of decision and one that provokes a good deal of controversy in many staff rooms. The fact that three schools of the sample which espoused the principle of heterogeneous classes found it desirable to compromise in mathematics and languages is indicative of the problems inherent in this discussion.

(e) Children with Special Needs or Abilities

Questions were asked about non-academic students remaining at school beyond the compulsory attendance age and about disadvantaged, disruptive and able pupils.

Schools generally encouraged the non academic sixth former to remain at school provided he was willing to make the

effort to attempt a course and to conform to school requirements. In cases where such students were not welcome (three grammar schools and a sixth form college), other arrangements were available in the locality. Depending upon the size of the school, the tendency was to offer as wide a range of subjects as possible. In the case of the very largest sixth form colleges, the whole range of CSE and O Level repeats were included, also additional CSE and O Level subjects, full A Level and CEE subjects.

The distruptive child was counselled widely from the group tutor up through the hierarchy to the headmaster if necessary. Most schools had a routine procedure for dealing with unco-operative pupils, one in which the parents were called into consultation when the matter became serious. Suspensions were strictly controlled by the Local Education Authorities.

Special arrangements were not generally made for the gifted other than to encourage them to remain at school. In cases where a gifted student happened to be financially or socially disadvantaged, attempts to gain financial or other suitable assistance were made.

(f) Decision Making

Twelve of the thirteen headmasters stated that they made the ultimate decisions in matters of importance. (The single exception was the head of the independent progressive school, who retained this power only in certain defined areas.) It was clear from the interviews that these decisions were, in fact, rarely made by the headmasters alone, that they were widely influenced by staff and student opinion and by the parents, the community and governing boards.

No matter how autocratic heads appeared to be, none of them was prepared to go ahead with major change in the face of widespread staff opposition. Comprehensive schools and sixth form colleges were typified by staff committees used in advisory, exploratory and planning capacities. Committees, both permanent and ad hoc, were widespread and a considerable number of meetings were held. Committees tended to be representative of a wide cross-section of the school or those sectors affected by a particular issue. This evidence suggests that although school heads may assume ultimate responsibility for decisions, they do not necessarily make them themselves.

On the other hand, student committees did not generally appear to exercise the same influence, nor did they exist in two of the thirteen schools. Despite this, heads agreed that student opinion did affect school policy. Some schools retained the traditional prefectorial system, others adopted some form of elected or representative council designed to be a sounding board for student expression. Two of the schools in the sample had what appeared to be outstanding examples of councils which were invited to contribute to school policy making. The headmasters concerned reported that they did so effectively.

2) SCHOOL OBJECTIVES ACCORDING TO THE LITERATURE

There is considerable written discussion about school objectives.

Bloom's "Taxonomy" represents a convenient starting point (Bloom, ed., 1956). Bloom and his team saw three domains; cognitive, affective and psychomotor, and developed the first

two of these. The cognitive domain refers to the "recall or recognition of knowledge and the development of intellectual abilities and skills" (Book 1:7). Educators are enjoined to identify major objectives and choose which to develop and when. The affective domain embraces the extent to which the individual is involved in his own learning programme. A hierarchical development is conceptualised in which the learner progresses from the most elementary awareness, through the stages of responding, giving value to, organizing and ultimately generalising a whole value system. There has been some development of the Taxonomy by scholars, such as Crawford (1966), who identified six sequential processes of learning. Bloom himself has been associated more recently with the concept of "mastery" learning which proposes that students can master what they are taught (Block, ed., 1971).

The important contribution of this particular method of inquiry has been to specify those objectives of education which might be referred to as learning objectives.

French and his associates made a more catholic interpretation of educational objectives (French, 1957). The framework of this analysis came from the 1938 United States Educational Policies Commission which the team amplified. Four broad areas were specified:

a) the objectives of self realisation

b) the objectives of human relationships

c) the objectives of economic efficiency

d) the objectives of civic responsibility.

The Dettman Committee in Western Australia was much attracted by those conclusions and, in turn, summarised its

objectives for Western Australian schools as follows:

> "Secondary schools, freed from the constraints of external examinations, should be able to concentrate on the broad aims of education directed towards the promotion of each student's intellectual developement, integration into society, physical and mental health, economic competence and emotional and spiritual growth. The purpose of education is not merely to transmit culture but to equip students for future decision making with a view to the improvement of society." (Dettman, 1969a:1)

In reviewing the Achievement Certificate eight years after its inception, the State School Teachers' Union of Western Australia added two further objectives:

(i) to help students to understand and cope with changes in society; and

(ii) to help students understand the role and responsibilities of organizations within the community.

(State School Teachers' Union of Western Australia, 1976)

In the same vein, a conference in New Zealand proposed that the aims of education were to develop individual skills in learning, relating, choosing, creating, communicating, challenging and responding to challenge, and living in the community (Education Development Conference, 1974).

In England, the Newson Report examined school objectives in considerable detail. It saw the general objectives as skills, qualities of character, knowledge, physical well being, capacity for thought, judgement, enjoyment, curiosity, the need to develop a sense of responsibility and to begin to arrive at some code of moral and social behaviour which is self-imposed (Newson Report,

1973). The so-called Green Paper of 1977 also saw aims in behavioural terms (Department of Education and Science, 1977a).

Educational objectives examined so far stress the primacy of the pupil. To the learning objectives have been added a number behavioural objectives.

A further development of the theme has been the recognition that there are objectives beyond the child for the school as an organization.

Poster (1971), in looking at objectives, added some of his own. These included assistance from the community, recreational provision for the community, cultural provision for the community, the integrated youth service, the integrated adult education programme, participation in community development and democratic control of the school community.

Another group concerned with lay participation in education is exemplified by the findings of a Royal Commission on Local Government in England, which concluded that school governing bodies ought to be influential and lay persons ought to participate in school affairs (Royal Commission, 1968).

One of the contributions of writing which emphasises the management aspects of the school has been the recognition of the concept of **organizational objectives.** A team under the sponsorship of the National Foundation for Educational Research has drawn up a statement of objectives for the English Comprehensive School and, in so doing, they have provided new emphasis for the old framework (Ross, Bunton, Evison and Robertson, 1972). In a summary statement, objectives for the comprehensive school are classified in terms of organizational structure and cultural context.

McMullen (1970) is another who attempts to view objectives in an organizational setting.

3) SCHOOL BROCHURES

A search of school policy documents is not easily accomplished. Policy statements of individual schools are the property of the school concerned and are rarely to be found in print. Exceptions are those reported in descriptive or case studies (for example, Gross, 1975), those nationally famous, for example, the Abraham Moss Community Centre and "Risinghill") or in the memoirs of retired headmasters (for example, Goodwin, 1968). Another source of reference may be books describing "movements" such as the move towards comprehensive schools, (for example, Pedley, 1966).

One set of school objectives copiously reported has been that of the Sidney Stringer School (Open University Course E321/2, 1976). Objectives for the school (which is run on MBO lines) are stated in both behavioural and managerial terms. In summary form the statement includes the following:

(1) What Sidney Stringer as a comprehensive school tries to do.

(2) In what way Sidney Stringer aims to be a Community College.

(3) What the school (called the "enterprise") aims to do

for its pupils

for its community

for the staff

for the enterprise.

(4) The principles and beliefs of the Sidney Stringer School.

(5) The educational practices of the Sidney Stringer School.

(6) The community use of the Sidney Stringer School.

Most schools produce brochures which state or imply objectives. A number were collected in late 1976, objectives were summarised and results tabulated (Table 2,p102), The examples of the table could be considered typical of the type of statements appearing in school brochures. From those used it is clearly demonstrated that the schools see their objectives in learning, behavioural and managerial terms, although not all schools list all three.

SCHOOL OBJECTIVES AND POLICIES

From the preliminary investigation, the literature and the school brochures, an extensive list of objectives was compiled. Duplicated items were combined and rationalised and the forty-five discrete aims identified were classified under two major and eight minor headings. This complete statement is given in Appendix B "Summary of School Objectives".

There is a logical link between objectives and policies. Objectives indicate what should be attempted and lead on to consideration of how this is to be accomplished. Thus, for example, the objective "the acquisition of necessary basic skills and knowledge" would be achieved by means of the application of a proper course of study. The policy area clearly indicated is the

SCHOOL	STATED OR IMPLIED OBJECTIVES
A Grammar School in Avon	the passing of examinations; guidance in the selection of courses; guidance for future education or vocation
A Technical Grammar School in Leics.	high academic achievement in examinations; the development of technological skills; guidance and counselling
A Sixth Form College in Hampshire	providing a suitable course for any post compulsory-age pupil; personal development; vocational orientation; social integration
A large Comprehensive City School in Avon	students must acknowledge Sixth Form code of ethics; the student acknowledges his own academic and social responsibilities
A Rural Comprehensive School in Gloucs.	the establishment of good school/community relations; development of the individual; guidance; the passing of examinations
A Rural Traditional Independent Boys' School in Somerset	to prepare students independently, morally and socially for the future; to care for the individual; to develop gentlemen; to to pass examinations; to provide guidance and counselling
A large Urban Comprehensive School in Avon	to provide a total community service; to provide for the welfare of pupils; to cater for community needs through its pupils
A Semi Rural Comprehensive School in Avon	the roles of various staff members are pastoral, academic and administrative: these, therefore, are the aims of the school
A Semi Rural Comprehensive School in Oxfordshire	respect for the individual; staff leadership with the authority of maturity; promotion of fixed ideals (honesty, truth, industry); each child to develop his full personality; each child to be stretched to the limit; each child to have self-discipline; high standards of appearance, behaviour, courtesy; outreach to the community
A Federation of Colleges in Cambridgeshire	a community based school;development of the child as a community member; to provide a balanced curriculum; to provide recreational, social and personal development; the highest professional stards; moral and practical support for the home

Table 2: Stated or Implied Objectives of Ten English Schools in early 1976

area of curriculum, the term used to describe the academic programme.

Each of the forty-five objectives was examined in terms of the policy area it appeared to indicate. To give several other examples;

"giving him the necessary vocational guidance" points towards a policy area of welfare;

"helping to understand the democratic process" indicates a policy area of school ethos;

"integrating the total school programme" refers to the school's organizational structure;

"maintaining the reputation of the school" refers to a policy area of public relations;

and so on.

Nine policy areas were identified in this way and, in the light of evidence, defined. The total statement is given in Appendix C "Nine Policy Areas of the School Identified and Defined". Figure 3 (p104) represents a conceptual summary of the objectives and policy areas identified in this analysis.

Theoretically, the comprehensive secondary school aims to carry out the eight objectives on the left of the model by involving itself in the nine policy areas to the right. The functioning of the school could be examined in the light of the model. Some investigation into the functioning of each of the policy areas would be necessary.

The model shows the interrelated nature of all the objectives with all the policy areas. Achieving any one objective requires the application of more than one of the policy areas.

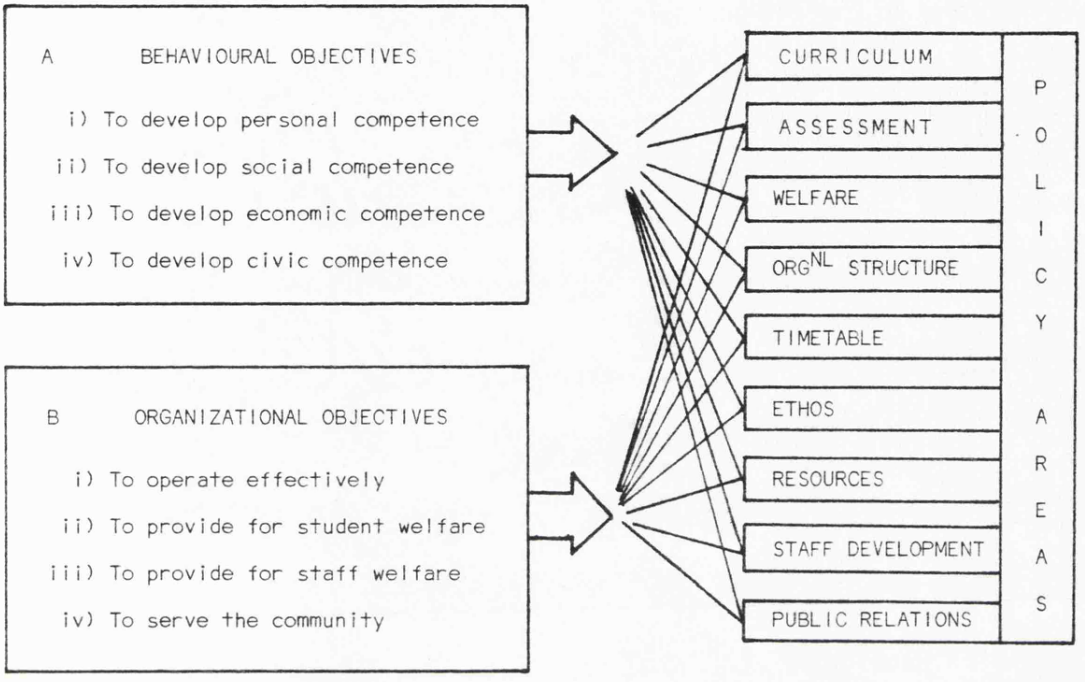

Figure 3: A Conceptual Model of the Objectives and Policy Areas of the School

THE POLICY MAKING PROCESS

One further theoretical construct of the school operation is pertinent background material. A school, having identified what the aims and objectives are and being aware of the main policy spheres which will achieve these, has still to decide how to translate its purposes into effective action.

The proposition that decision making is central to the functioning of an organization has been accepted since the time of the earliest studies in organizational theory (Taylor, 1911; Fayol, 1916,1949; Barnard, 1938). In particular, the work of Simon (1957) has dictated that any serious study of management must

at least consider the important role of the decision process. Decision making has been seen in one recent text as almost universally defined as 'choosing between alternatives" (Luthans, 1973:188).

In this study, the term "policy making" may be used as an umbrella term that includes decision making functions. From various sources, a definition of the policy making process will be developed and a model devised. The idea that there are various levels of decisions of varying degrees of importance is self-evident. The concept of a hierarchy of decisions is well supported in the literature

1) Parsons (1956) identified three broad levels of decisions: policy, allocative and co-ordination.

2) Tannenbaum was interpreted (by Thomason, 1970) as distinguishing among directive (policy or legislative) decisions, administrative (method) decisions and supervisory (day to day) decisions.

3) Simon (1957), whilst reluctant to accept the simple distinction implied between policy and administrative decisions, favoured the use of hierarchical terms such as **legislative policy, management policy** and **working policy**. He further identified a number of organizational "practices" which operate in addition to established policies. Simon was particularly interested in legislative policy which he described as "the ethical premises of management".

4) Katz and Kahn (1966) identified prospective (future) policy and retrospective (currently in force) policy and saw the process of policy making as the decision aspect of organizational change.

Four main facets were described:

a) Policy making as the formulation of substantive goals and objectives.

b) Policy making as the formulation of procedure and devices for achieving goals and evaluating performances.

c) Routine administration as the application of policies to outgoing operations.

d) Residual ad hoc decisions without implication beyond the immediate event.

The first two stages were seen as clearly residing in the policy arena, the latter two more generally outside it, that is, decision making as distinct from policy. The authors admitted that the distinction is not clearcut, that there is some overlap between "policy" and "decision".

5) A more recent team postulated that there is a generally accepted distinction between minor decisions (administrative) and major decisions (main themes of policy), (Open University, Course E221, Unit 2).

There is no attempt here to distinguish between decision making and policy making except to make the point that the latter is a more all-embracing term covering a wider spectrum of the management activites of the school. As such, it has a more useful function with respect to this inquiry.

The term "policy" has been variously defined in the literature. Ten of these definitions are listed in Appendix D "Various Definitions of the Term 'Policy'". The information given in Appendix D enables the elements of policy, as seen by various

writers, to be identified. With the exception of the concept of "evaluation" mentioned only in two of the sources, there is fairly general agreement about the elements of policy (Table 3).

"Elements of policy identified or implied in various definitions or explanations	DICTIONARY	LAROUSSE	KATZ & KAHN	PARSONS	TANNENBAUM vide THOMASON	HOUGHTON	FRIEDRICH	ANDERSON	DUBRIN	LINDBLOM
Proposed or committed action or statement of intent	*	*	*	*		*	*	*	*	*
The decision process	*	*	*	*	*	*			*	*
Goal definition or formulation	*		*	*	*	*	*	*	*	*
Evaluation				*	*					
The functions and processes of the organization	*	*	*	*		*	*			*

Table 3: Identification of the Elements of Policy

There are four agreed ingredients, namely

1) a proposed or committed action or a generalised statement of intention;

2) a decision or series of decisions designed to achieve this;

3) identification or formulation of the primary goals or

major objectives; and

4) involvement of the mechanisms available in the pursuit of these goals.

Policy making is understood throughout the study to embody all four components identified above and is defined as follows:

Policy making is a process embracing both the specification of major organizational objectives and the methods by which they are to be achieved.

Implicit in this definition is the understanding that policy making is a continuous process of action and interaction amongst the members of the organization. Essential parts of the study will be identification of the major goals, decision making within the organization, the roles of various organization members and the methods of administration.

The policy process, as defined, is an ongoing occurrence. Decisions, once taken, have to be planned, carried out and, in the light of operation, reviewed: a task which returns the organization to the point of decision. Policy making is a cyclic operation which continues throughout the life of the organization: there is a goal definition stage, a decision making stage, a planning stage, an operational stage and a review stage. Outside and inside influences buffet and modify what occurs and, as Bauer and Gergen (1968:11-24) have shown, the process is an open system, not a closed circuit. Nevertheless, this simplistic model, which can be illustrated in a diagrammatical form (Figure 4), will serve to provide a conceptualisation of how the school operates.

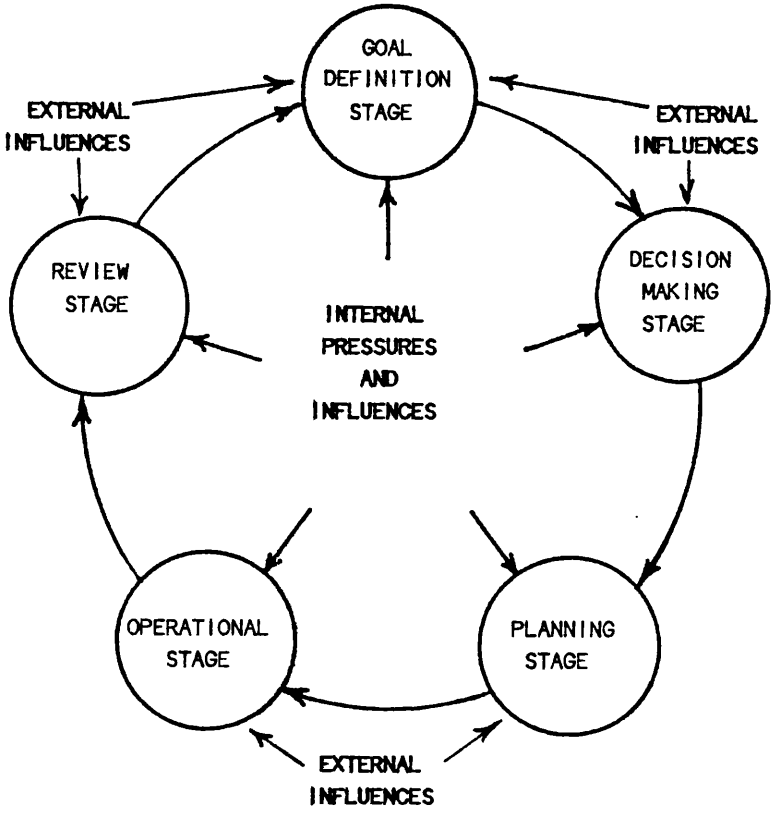

Figure 4: The Policy Process: A Conceptual and Simplified Model

SUMMARY

This preliminary section has attempted to provide a theoretical base from which to plan the inquiry. Chapter 1 outlined the main intention and problems of the study and indicated the types of questions to which answers would be sought. Chapter 2 gave the evidence of theory and research into educational administration to indicate what would be involved in an organizational analysis. In this current Chapter, the background information has been about the secondary comprehensive school as such, about what such schools are trying to do and how they attempt to do it.

From this considerable evidence, the investigation can be designed, executed and the findings analysed.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

The suitability of the Getzels-Guba framework (Figure 1, p.4) as the basis for an organizational analysis has been well demonstrated in the theory reviewed. Institutions are regarded as functioning entities dependent upon the efforts of individuals who attempt to carry out their assigned roles. Reference to the model shows two major dimensions, the **nomothetic** and the **idiographic**, and six minor elements, **institution, role, expectations, individual, personality** and **needs disposition.**

What is proposed for this analysis is that components of the comprehensive school and its teachers be considered representative of the six elements. Using specific features, it will be possible to amplify the model and utilise the resultant paradigm as a basis for the research design.

THE RESEARCH MODEL

a) THE NOMOTHETIC DIMENSION

The institutional aspect is the comprehensive secondary school. Institutions have been seen as characterised by structure, purpose and function, paralleling the Getzels-Guba elements of **institution, role** and **expectation.** Suitable identifying features representing each of these may be determined by reference to the types of questions posed for each of these elements in Chapter 1.

Institution; The questions asked were, "How is the school organized?" and, "Are all such schools organized similarly?" The analysis must show the design of the organization, the way the component parts are put together. The element of **institution** may be represented by the concept of **school structure.**

Role: The key question with respect to this attribute was, "What are the aims and objectives of the comprehensive secondary school?" The analysis must show the demonstrated goals of the school. Theoretical goals have been previously identified to assist in this process. For purposes of the research, the **role** element may be linked with the concept of **objectives.**

Expectation: The key questions were, "How does the comprehensive school operate?" and, "What are its anticipated outcomes?" Operation of the school has been seen in terms of the **policy process,** which may be used to identify the element of **expectation.**

b) THE IDIOGRAPHIC DIMENSION

The personal aspect is the teacher in the school. The elements of this contribution are seen as **individual, personality** and **needs disposition.** For each of these a suitable identifying variable is to be determined. In each case, in examining the identifying question, it is important to remember that the teacher is seen in the context of his school.

Individual: Overlooking such personal characteristics as sex, status and age, it is the individual's reaction to his school that is all important. The original question recognised this and asked, "Is the teacher's role within the comprehensive school satisfying?" Using the terminology of organizational theory, this

is really asking about **personal needs satisfaction** which may be used to identify the element **individual.**

Personality: Within the context of the school, each teacher reacts towards the task of education through his own perspectives. The original question asked, "To what extent do personal characteristics affect the work of the comprehensive secondary school teacher?" Such an inquiry invited an examination of the professional attitude of the teacher towards the educational objectives of the school. **Professionalism** is thus a suitable variable to link with the element **personality.**

Needs Disposition: The question posed for this item was, "Is the comprehensive secondary school teacher's need to participate satisfied?" The literature clearly shows that the **degree of participation** is an ingredient of an individual's need disposition. Satisfaction comes from being involved to the degree that the individual wishes. This, then, is a suitable variable to identify with **needs disposition.**

What is not claimed in the preceding discussion must be stressed. It is **not** claimed that the variables identified for the six elements are the only possible ones or, indeed, that they represent the whole spectrum of the element. They are seen as **suitable** and **representative.** If used in an organizational analysis they will indicate functioning patterns for each of the nominated elements.

When the six representative variables of the school and its teachers are superimposed on the Getzels-Guba framework, the resultant paradigm is represented by Figure 5. This model will be used to determine the structure of the research and the

resultant analysis.

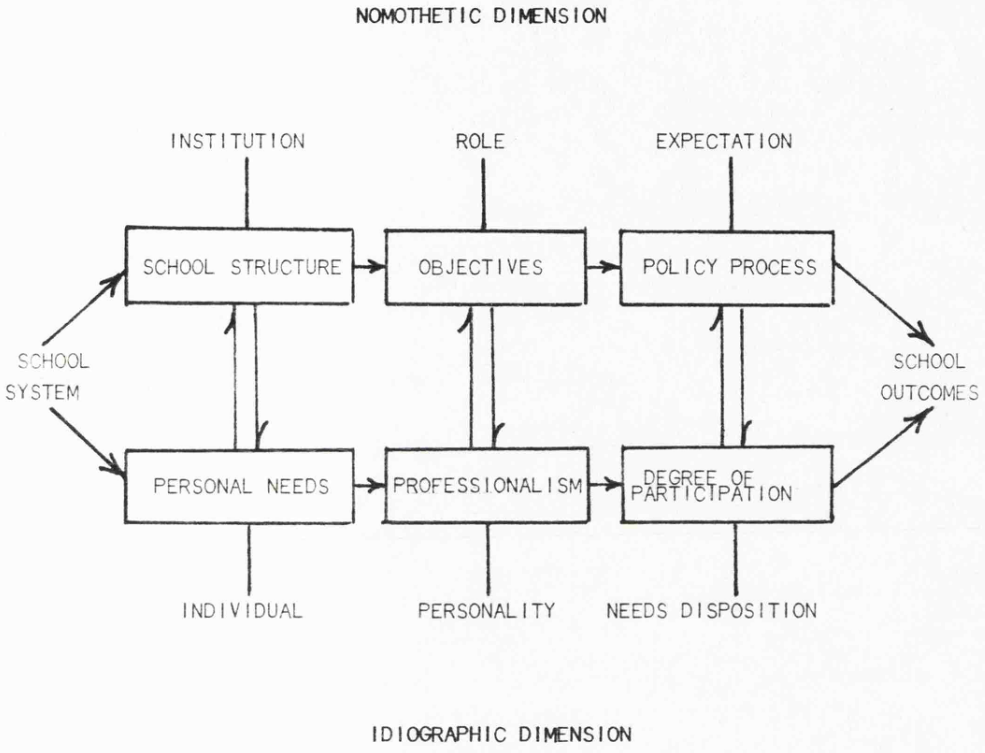

Figure 5: A Conceptual Model for an Organizational Analysis of the School

This development of the original Getzels-Guba framework has provided a model specifically suited to the analysis of the school as an institution.

The nomothetic dimension represents the comprehensive secondary school. By organizing itself in a certain way (school structure), it attempts to determine its goals (objectives) and finds ways and means of carrying them out (policy process).

The idiographic dimension describes the actions of the teachers within the school. The individual, by application of his own particular skills and actions, carries out the tasks of the organization. The level of his effectiveness is determined to some extent by his attitude towards the organization (his personal needs satisfaction), towards its goals (his professionalism) and towards the processes of the organization (his degree of participation).

All aspects of the model are linked either directly or indirectly. The relationship between the teacher and the school is one of interaction and interpenetration.

THE METHODS TO BE EMPLOYED

The research model indicates that the investigation has two distinct parts, one to examine the functioning of the school as a unit, the other to look at the teachers within the school. When this has been achieved, the interrelationships between the two may be examined.

The two major tasks appear to suggest quite different approaches:

(1) In examining the structure and functioning of the school, it appears desirable to observe the school in action, to ask questions and, as a result, to reach informed conclusions. The interview situation lends itself to the exploration of these functional circumstances. The observer role is possible if the opportunity to spend time within the school is created. Structured interviews with several staff would provide the reason for an

extended stay.

The disadvantages of such a method mainly relate to the time required. For every school in the sample (and the general nature of the topic demands a reasonable size of sample), time for a number of visits and a series of interviews will have to be set aside. Analysis of the data is also an exacting and time-consuming exercise.

The advantages cannot be gainsaid. Close association with the sample schools will enable the researcher to view any findings in the light of knowledge of the circumstances in which they occur.

(2) In testing the personal characteristics of teachers within the school, it seems more appropriate to employ empirical methods. In this case, the co-operation of a large proportion of the teachers in each school in the sample would make any other approach impracticable. Using an a priori methodology, it should be possible to test a number of hypotheses indicating the behaviour and response patterns of certain types of teachers in specific situations.

The disadvantages of this method are related to the criticisms frequently levelled against attempts to make quantitative measurements of human behaviour. Despite this difficulty, acceptance of the technique is widespread and the statistical methodologies well established.

The advantages relate to the numbers that may be included and the extensive capacity for finding out and sorting a large array of facts.

The use of two different kinds of research techniques is viewed as a definite advantage. Empirical research methods

are not universally acceptable in behavioural analysis and phenomenonological approaches are viewed with like cynicism by their critics. The use of both techniques constitutes a potential monitoring device.

To sum up: the study is to be based on a representative sample of comprehensive schools and is to be broad in nature; it is intended to test the twin strands of institution and individual; and to use both case study and empirical methodology. It has been indicated previously that the schools in the sample would be in England and Western Australia.

TESTING THE NOMOTHETIC DIMENSION

A PLANNED ROLE FOR THE OBSERVER

Observing the operation of the policy processes within schools presents recognised difficulties related to the influence of the observer on the observed. Apart from the fact that it is a subjective exercise, conclusions are also suspect because of behaviour modification as a result of the intervention. The subject may give the responses he thinks the observer wants to hear or he may give the responses thought to be ideal.

Lutz and Iannaccone reject the suggestion that the participant-observer can reach a stage where he does not infringe upon the system. They do accept, however, that the essential elements of a system under observation will not be seriously modified if the role of the observer is carefully chosen and played. Three alternative roles of participant-observer are accepted as viable, the participant as an observer, the observer as a participant

and the observer as a non-participant. It is suggested that the role of the participant as an observer should be chosen if it is open to the researcher (Lutz and Iannaccone, 1969:106-117).

The researcher in this case felt that the participant as an observer role was open to him. As a secondary school principal, he found himself accepted in schools as being "of the system". In early visits to English schools, he was accorded recognition and courtesy and was thus encouraged to attempt, as far as possible, the participant-as-observer role. Limitations brought about by the fact that he was only a very transitory participant with no real responsibilites to the organization would have to be taken into account.

The participant-as-observer is seen as being in a strong position to observe and record descriptive data, record direct quotes and conduct unstructured interviews. He is not seen as being well placed to conduct highly structured interviews or to use paper and pencil tests, such as questionnaires (Lutz and Iannaccone, 1969:113). Since a highly structured interview was not envisaged, this role for the observer implied only one major difficulty: the administration of the accompanying test instruments. It was decided that a member of staff would act as agent for the distribution and collection of the questionnaire to be used. These were to be demonstrably sealed and unopened during the visit.

A number of interviews would have to be held in each school, one of these with the headmaster. It was decided that the latter would invariably take place first, something of which all subsequently interviewed staff were to be made aware. This was to be an attempt to give staff confidence that discussions

held with them were confidential and, in particular, that observations they made would not be relayed to the headmaster.

The participant-as-observer role also involves some actual as well as assumed participation. It was decided that visits to schools would occupy no less than one week, that the observer would conduct interviews spaced throughout this period and that the intervening time would be spent interacting with and, whenever possible, assisting staff.

The role planned for visits involved semi-structured interviews, observation and interaction, as well as the administration of the test instruments required for the idiographic section of the experiment.

DESIGN OF THE SCHOOL VISIT AND THE SEMI-STRUCTURED INTERVIEW

The requirements of the school visit have been stated for the main part. It was desirable that the researcher, in so far as it was possible, be a participant with the opportunity for observation and interaction. In addition, it was necessary to obtain statistical and factual details about the school.

For each school, a cover sheet was prepared to record the data obtained by formal and informal methods during the week of the visit. The items required included the following:

(i) Name and address of school, headmaster, education authority;

(ii) Number of pupils;

(iii) Number of staff, staff organizational structure;

(iv) Class and pastoral organization;

(v) Types and functions of staff responsibility groups;

(vi) Types and functions of student responsibility groups.

Certain requirements, as follows, were determined for the interview:

(1) It was to cover each one of the nine identified policy areas, namely, curriculum, assessment procedures, student welfare, organizational structure, the timetable, ethos, resources, staff development and public relations.

(ii) It should take into account the five described stages in the policy making process, namely, goal definition, decision making, planning, operation and review.

These specifications required a focussed interview along lines defined by Merton and Kendall (1946). This type of interview is specific in that the respondent is aware that he is being treated as an expert whose opinion is valued. The focussed interview requires the interviewer to make a thorough analysis of the situation so that he knows precisely what he wants to ask. Four criteria are necessary:

a) apart from the leading questions, the respondent is not directed with respect to his response. If he asks a question, the answer should take the form of a question redirected to himself;

b) the respondent is to be given full scope for expression;

c) the biggest possible advantage should be taken of evocative stimuli and responses made by the subject; and

d) the interviewer should attempt to bring out the

affective and value-laden implications of the subject's responses.

A focussed interview along these lines was clearly within the boundaries of the semi-structured interview envisaged.

One problem anticipated concerned the length of the interview. It was part of the design concept that the session should occupy, if possible, no more than the duration of a school period for the practical reason that some staff members only had a single period free at a time. (In practice, the interview stimulated so much discussion that the average time taken was more than an hour, longer than the typical period of forty minutes. Respondents, in the main, wanted to prolong the interview. Some interviews with headmasters in particular lasted more than two hours.)

PRELIMINARY TESTING OF DISCUSSION ITEMS

Three schools not in the final sample agreed to allow the author access to staff to test the proposed interview topics for suitability. Those schools were not among the twenty-four in the original visits made and consisted of a city school of eight hundred pupils, a middle-sized semi-urban school of nine hundred and a rural school of four hundred.

The researcher was accorded the courtesy of what amounted to honorary membership of the local branch of the Head Masters' Association. Through regular contacts, by attending meetings and functions, it was also possible to test proposed topics on a number of school heads.

As a result of these discussions, both in the schools

and with various headmasters, a list of items suitable for the semi-structured interviews was prepared.

The preliminary discussions demonstrated the unsuitability of taping the interviews. It was seen that in many cases the presence of a tape recorder was an inhibiting factor which reduced the spontaneity of a number of respondents; others simply declined to be taped. Recording an untaped interview presents problems to the researcher, who must record responses in written form whilst at the same time maintaining the spontaneity of the interview. This may be assisted to some extent by the preparation of an interview schedule and this was acted upon. The reason for choosing a semi-structured interview was to heed the advice of commentators to the effect that when opinions are being sought and rapport between the interviewer and his subject is to be maintained, the high level of formality of a fully structured interview will not allow these aims to be fulfilled (see, for example, Burroughs, 1971:103-105).

THE INTERVIEW SCHEDULE

After the initial monitoring and the rejection of a number of possibilities, the questions selected to be asked of each of the policy areas were as follows:

1. **Curriculum**

Who plays what role in monitoring and reviewing the overall school curriculum?

Who plays what role in determining individual subject content?

2. **Assessment Procedures**

Who plays what role in determining the student assessment

procedures?

What provision is made for review and possible change to the system?

3. Student Welfare

Who plays what role in the programme designed to cater for the welfare of each individual child?

How was this programme decided?

4. Organizational Structure

How was the grouping of classes decided?

How are the number and types of staff meetings determined?

5. Timetable

How is the distribution of school time determined, both for the weekly timetable and the yearly programme?

How were staff teaching tasks determined?

6. Ethos

Who decided on the school rules? How are they reviewed?

Who decides on such matters as standards of dress and behaviour?

7. Resources

How is it decided to spend discretionary funds?

How are decisions about who uses which classrooms made?

8. Staff Development

What is done about in-service within the school and who is involved?

What provision is made for the guidance of a new teacher, and by whom?

9. Public Relations

Describe the public relations methods of the school, stressing particularly who is involved.

What role do parents play in the school?

RECORDING, ASSESSING AND DECODING

During the conduct of the interview it was to be made clear to the subject that his or her opinion was valued and that it would be taken down in note form. (In practice, the taking of notes did not appear to be an inhibiting factor.)

Copious notes on the school in operation were also to be taken during the visit. Whenever something apparently pertinent to the structure, function, or outcomes of the school, or staff reaction to it, was apparent, it was to be noted.

Notes from school visits were to be systematically analysed in terms of the nine policy areas and the questions posed. In the analysis, as in the questioning, particular note was to be made of matters relating to school structure, objectives and the policy process, the elements identified in the model for the nomothetic dimension.

The objectivity with which notes could be taken and analysed was to be recognised as critical. At all times, when carrying out either of these functions, the researcher was to assume a strictly neutral role.

TESTING THE IDIOGRAPHIC DIMENSION

The idiographic half of the model requires reference to the teacher, his personal needs satisfaction, his professionalism and his degree of participation. It has already been indicated that these will be tested among a wide sample of teachers, utilising

empirical methodology.

The usual technique is that described as the a priori approach: deductive reasoning from cause to effect. This generally requires the formulation of hypotheses, usually in the null form. This form of hypothesis requires that it be capable of being refuted. An experiment permits the facts of observation to reject the null hypothesis. Another technique is to state the hypotheses in experimental form, that is, to hypothesise as to the likely outcomes, which may then be accepted or rejected. For purposes of this experiment, null hypotheses will be formulated, this being the more commonly accepted method.

DETERMINATION OF HYPOTHESES

The variables to be investigated are as follows:

1. School Characteristics (size, environment, country)
2. Teacher Characteristics (sex, marital status, age, experience, job status, time in school, subject taught, qualifications)
3. Personal Needs Satisfaction
4. Professionalism
5. Degree of Participation

School and teacher characteristics are most likely to be determined by circumstances external to the school and may be regarded as the independent variables. Personal needs satisfaction, professionalism and perceived participation may be the product of these independent characteristics and are influenced by the school. For purposes of the research, these are regarded as the dependent variables.

The ramifications of the most important of the various combinations of these variables may be used to determine the hypotheses to be tested.

a) The relationship between School Characteristics and the Reponses of Teachers to the Dependent Variables

The issue is whether the school in which a teacher works influences his needs satisfaction, his professionalism and his perceived participation. It has been assumed early in this discussion that each school is different. Does the research evidence show that these differences affect the responses of the teachers within the schools?

These questions lead to the formulation of the following null hypotheses.

Hypotheses 1

Schools will not differ with respect to the personal needs satisfaction of the teachers employed in them.

Hypothesis 2

Schools will not differ with respect to the professionalism of the teachers employed in them.

Hypothesis 3

Schools will not differ with respect to the extent to which teachers achieve their desired level of participation in decision making.

Another set of questions relate to school characteristics. Does the size of a school, its environment or whether it is in England or Western Australia influence the needs satisfaction, the professionalism and the perceived participation of teachers?

These questions, in turn, lead to further hypotheses.

Hypothesis 4

The size of a school does not significantly influence the personal needs satisfaction, the professionalism or the perceived participation of the teachers employed in it.

Hypothesis 5

The environment of a school does not significantly influence the personal needs satisfaction, the professionalism or the perceived participation of the teachers employed in it.

Hypothesis 6

Personal needs satisfaction, professionalism or perceived participation will not differ significantly for teachers in English or Western Australian comprehensive secondary schools.

A further set of issues is suggested by the relationships between response levels of teachers in various schools for the dependent variables. Is there, for instance, a common relationship between the level of personal needs satisfaction and professionalism from school to school? The possible sets of combinations determine three further null hypotheses for testing.

Hypothesis 7

There will not be a positive relationship between the level of response obtained by schools for personal needs satisfaction and the professionalism of staff.

Hypothesis 8

There will not be a positive relationship between the level of response obtained by schools for the personal needs satisfaction of teachers and the extent to which they achieve their desired level of decision making.

Hypothesis 9

There will not be a positive relationship between the level of response obtained by schools for the professionalism of teachers and the extent to which they achieve their desired level of participartion in decision making.

b) The Relationship between Teacher Characteristics and their Responses to the Dependent Variables.

The question is whether the particular circumstances of the teachers affect needs satisfaction, professionalism and perceived participation. Are, for instance, senior staff more satisfied than junior staff, are males more professional than females, and so on?

Such issues lead to the formulation of further null hypotheses related to personal teacher characteristics.

Hypothesis 10

The personal needs satisfaction of teachers will not differ according to their sex, marital status, age, experience, status, years in a school, teaching subject and qualifications.

Hypothesis 11

The professionalism of teachers will not differ according to their sex, marital status, age, experience, status, years in a school, teacing subject and qualifications.

Hypothesis 12

The extent to which teachers achieve their desired level of participation in decision making will not differ according to their sex, marital status, age, experience, status, years in a school, teaching subject and qualifications.

c) The Relationships between Dependent Variables.

Intuition suggests that there will be some correlations

between satisfaction and professionalism because professional people ought to gain satisfaction from their job. On the other hand, circumstances may frustrate attempts to exercise professional tasks and the relationship may not be particularly high.

Secondly, will the evidence of this investigation reveal that teachers who participate at the desired level have a high degree of personal needs satisfaction?

The third possible combination poses the question about the potential relationships between professionalism and the degree of participation.

Null hypotheses based on these premises are as follows:

Hypothesis 13

There will not be a positive relationship between the personal needs satisfaction and the professionalism of teachers.

Hypothesis 14

There will not be a positive relationship between the personal needs satisfaction of teachers and the extent to which they achieve their desired level of participation in decision making.

Hypothesis 15

There will not be a positive relationship between the professionalism of teachers and the extent to which they achieve their desired level of participation in decision making.

In attempting to examine the idiographic dimension of the comprehensive secondary school by empirical methods, the experiment to be designed is required to find the means to test these hypotheses.

SOME IMPORTANT PRELIMINARIES

The dependent and independent variables may be assessed from teacher responses to a suitable questionnaire. Suitable test instruments have to be chosen to measure teacher response to the dependent variables, the choice of instruments being critical to the investigation. It was decided that where possible, tried, tested and validated instruments would be used. The construction of a test instrument, being research in its own right, would detract from the purpose of the investigation.

A number of potentially suitable instruments were available, particularly related to job satisfaction/morale. Many of the American researchers reviewed had used the Minnesota Satisfaction Questionnaire (MSQ) which had the advantage of being short and easily scored. Its main disadvantage appeared to be in its orientation to the American situation. Smith's forced choice Job Description Inventory (JDI) permits several differentiations of job satisfaction to be measured separately, is easy to score and clearly indicates high and low degrees of satisfaction. The main drawback to this instrument appears to be that it is job referrent rather than self referrent. Of the other commonly used instruments, Bentley and Remple's Purdue Teacher Opinionnaire had been widely used in the school sitation and was most thorough. It was rejected because of the length of time it took to complete. Smith's Staff Morale Questionnaire (SMQ) had been demonstrated by Brady (1976) to need considerable modification to suit English conditions and it was similarly rejected. The Needs Satisfaction Questionnaire of Porter (1961, 1961a), as modified by Trusty and Sergiovanni (1966) and used by Prieto (1975), appeared to be the most appropriate.

Professionalism had not been so thoroughly researched but the work of Corwin (1963, 1965, 1969, 1970) and Gross and Herriott (1965) was prominent. The test instrument of the latter could not be seriously considered because of its length. The Professional Role Orientation Scale of Corwin seemed, therefore, to be the most suitable.

In the area of decisional participation, the work of Alutto and Belasco (1971, 1972, 1973) and Belasco and Alutto, (1972) stands supreme. The chosen instrument could be based on theirs.

A full description of the final form of the selected test instruments will be given in the next section.

Reference has already been made to three schools which assisted in the selection of questions for the interviews. Teachers from these same schools were used for the pilot testing of the research instrument.

A particularly important requirement was that the questionnaire be seen as a small and reasonable package easily completed by the teacher. If a high response rate was to be obtained, it was necessary that the teacher be able to find the time to complete it before he became antagonistic towards it. The final questionnaire was made up in the form of an attractive booklet prefixed by an explanatory letter and containing all parts of the test instrument (Appendix E). Respondents from the pilot schools indicated that the completion time would be in the region of twenty minutes.

THE FINAL FORM OF THE TEST INSTRUMENTS

a) Personal Needs Satisfaction

The Needs Satisfaction Questionnaire of Porter had undergone some modification by some of its users. Its original orientations had been psychological, referrent to Maslow's needs hierarchy. The instrument contained thirteen items grouped under the five headings of Maslow's hierarchy. Examples of the items are the following:

* The feeling of self-esteem a person gets from being in my management position.
* The opportunity in my management position for participation in the determination of methods and procedures.
* The opportunity for personal growth and development in my management position. (Porter, 1961)

The adaptation of this instrument by Trusty and Sergionvanni related the experience specifically to the teacher in the school. Thus the items above became

* The feeling of self-esteem a person gets from being in my school position.
* The opportunity in my school position for participation in the determination of methods of procedure.
* The opportunity for personal growth and development in my school position. (Trusty and Sergiovanni, 1966)

Prieto's modification was to differentiate between the actual and the ideal reactions of the respondent to each statement. Testing both these reactions enabled the difference between perceived and desired satisfaction to be ascertained (Prieto, 1975).The Porter instrument, as modified by Prieto,

was tested on respondents from the three pilot schools. Preliminary scoring indicated that the instrument would satisfy the requirements of the experiment and indicate a personal needs satisfaction index of the teachers in their school circumstances. Respondents were asked to indicate their rating on a seven point Likert type scale. The final format is given under the heading "Personal Satisfaction" in Appendix E. This particular test and scores from it are referred to throughout as the Needs Satisfaction Index.

b) Professionalism

Pilot testing demonstrated that the Corwin Instrument, with some slight modification to suit English/Australian conditions, ought to provide the necessary measurement. The Professional Role Orientation scale consists of sixteen statements with which respondents are asked to state their degree of agreement. The first three relate to client orientation, the next six to colleague orientation, the next four to the monopoly of knowledge and the last three to decision making. Pilot testing and discussion revealed that three of the original sixteen items did not suit English conditions.

Item 5 read, "One primary criterion of a good school should be the degree of respect it commands from other teachers around the state." The item tested omitted the last three words, which would have been acceptable in Western Australia but were not applicable to England.

Item 12 in its original form read, "Schools should hire no one to teach unless they hold at least a four year bachelor degree." Because of differences in training methods, this was

altered to read, "Schools should not employ teachers unless they hold at least a first degree or its equivalent."

Item 13 originally read, "If there were a teacher shortage, it should be permissible to hire teachers trained at non-accredited colleges." Again, this was amended to read, "If there were a teacher shortage, it should be permissible to employ teachers who do not possess the full teaching qualifications."

These modifications were minor and not felt by respondents from pilot schools to alter the meaning of their American originals. The remaining thirteen items were presented in their original form.

The heading chosen omitted reference to the term "professionalism". It was felt that the word carried emotive connotations and that immediate identification of what was being measured would encourage respondents to give an ideal rather than an honest response. The word was included in the explanatory preamble. The final format of this part of the questionnaire is given in Appendix E under the heading "Personal Orientation".

c) Degree of Participation

In the Alutto-Belasco instrument, decisional participation is computed from responses to a series of questions which postulate twelve decisional situations occurring in a school. Teachers indicate whether they currently participate and whether they desire to do so in each decision. A measurement is derived by summing the total responses to each of these two questions and calculating the difference between the figures. These absolute differences were defined as the **Index of Decisional Discrepancy.**

Teachers are then grouped into one of three categories

decisional deprivation (where participation is less than preferred)

decisional equilibrium (where participation approximates to the desired level)

decisional saturation (where participation exceeds the preferred level).

The problem with the Index of Decisional Discrepancy is that a number of the twelve situations were not relevant in English and Western Australian schools. The twelve situations assume school level involvement in hiring staff, planning budgets, planning buildings and determining salaries. In English and Western Australian schools, these decisions were system level operations to all or some extent.

Conway (1973) had modified the Alutto-Belasco technique. He reviewed the original set of circumstances with a number of school principals and decided that some of the situations were redundant and that the testing of events actually occurring in schools would be more appropriate to teachers. He concluded from his evidence that his modified list of eleven situations was not a significant change to the original instrument.

In the light of the Conway adaptation, it was decided to construct and pilot test for effectiveness a new set of school decision making areas relevant to English conditions. If these also appeared suitable for Western Australian circumstances, they were to be retained in the final selection.

Initially, fifty-two school decision items were identified from six instruments that had been used to test decisional

participation. In addition to the original Alutto-Belasco items, situations were drawn from the Decision Involvement Index of Eye, Gregg, Lipham, Netzer and Grancke (1966), the Decision Involvement Index of Wendlandt (1970), the Decision Participation Scale of Paffenroth (1974), the Decision Mode Index of Mawter (1975) and the Teacher Participation Questionnaire of Bonnette (1975). The complete list of items and their sources is given in Appendix F, " A List of Decision Items Identified in Six Research Instruments".

The fifty-two items were reduced to twenty-one by eliminating those thought not to be relevant to school level decisions, such as the determination of salary, and by the amalgamation of items seen to overlap or duplicate each other.

For the twenty-one items, respondents in the pilot schools were asked to answer "yes" or "no" to the questions:

(a) Do you participate in the decision that is made?

(b) Do you wish to participate in the decision that is made?

The twenty-one situations were as follows:

1. Resolving learning problems for individual students.
* 2. Arranging pupils into class groups.
3. Determining methods of instruction.
4. Selecting the course content for your subject.
5. Selecting the textbooks for your subject.
* 6. Determining the range of subjects available in the school.
* 7. Determining the pupil assessment procedures.
* 8. Planning the school budget.

* 9. Determining the allocation of classrooms.

*10. Establishing school rules.

*11. Allocating teaching aids and supplies.

*12. Planning the timetable.

*13. Resolving parent grievances.

14. Determining the reporting procedures.

15. Planning the agenda for staff meetings.

*16. Determining the internal staff training programmes.

*17. Allocating staff teaching duties.

*18. Selecting staff for committees and other special duties.

19. Allocating staff to additional duties (for example, relief/cover).

20. Resolving teacher grievances.

21. Resolving problems with community groups.

Asterisked items were those in which the thirty-six randomly chosen teachers from the three pilot schools demonstrated the greatest discrepancies between their desire to participate and actual participation. The list was restricted to these twelve items since they were considered the most likely decisional situations to interest teacher respondents. It was also seen as useful to confine the list to twelve so as to make the instrument as alike as possible to the Alutto-Belasco original. Of the twelve items, only two, numbers 8 and 17 as listed above, were part of the original. This was not seen as a disadvantage. What was required of the instrument was that it should identify those teachers who felt most deprived and least deprived in terms of participation. The pilot testing showed that the items selected

should achieve this. Reliability of the new scale would have to be tested but the divergence of opinion on each item demonstrated that they were decisional situations of differing levels of participation. Alutto-Belasco techniques were to be used but the final format of the instrument bore little resemblance to the original. It is given in full in Appendix E, "Personal Participation".

Provision was made to monitor this personal participation scale by asking in another part of the questionnaire the following single question;

An Opinion

Many decisions must be made in any school. As far as your involvement in helping to shape school policies is concerned, do you feel that you are involved:

Very much more than you want to be	☐	
More than you want to be	☐	Tick
About as much as you want to be	☐	ONE
Less than you would like to be	☐	only
Very much less than you would like to be	☐	

At the time of planning the questionnaire it was not known to what extent, if any, this monitoring question would be used in the final analysis, Neither was it assumed that it would be appropriate to use the concepts of saturation, equilibrium and deprivation for the newly devised instrument. It was seen from the pilot testing that the results would show whether the teachers were highly deprived, moderately deprived or little if any deprived in terms of participation. This could be referred to as the **Participation Index.**

d) Personal Teacher Characteristics

The proposed analysis requires that it be possible to identify groups of teachers according to their individual circumstances. After consideration, the following were selected:

(i) Sex

(ii) Marital status

(iii) Age

(iv) Experience as a teacher (number of years)

(v) Organizational status

(vi) Number of full time years at present school

(vii) Subject area taught

(viii) Level of qualifications

Provision was made for a wide range of groupings where this was possible, for example, six categories of age, seven categories of experience, twelve subject areas. The final format of these personal variables is given in Appendix E under the heading "Personal Data".

PROGRAMMING AND SCORING THE RESPONSES

Data was to be collected, recorded, stored and computed, using the Statistical Package for the Social Sciences (SPSS) procedures (Nie, Hull, Jenkins, Steinbrenner and Bent, 2nd ed. 1975).

Apart from the three test instruments, storage of information on the following items was to be provided for:

School (identification number), student (identification number), location (England or Western Australia),

school size (large or small), school environment (urban, suburban, rural, sub-rural), sex, marital status, age, experience, status, years at present school, subject area, qualifications.

The other segments of the test instrument were to be scored as follows;

a) The Opinion Question

The opinion question was used to seek a general response giving the individual's perceived degree of participation in decision making. Respondents were to answer on a five-point scale in which the higher the score the greater the degree of deprivation. This score could be correlated with scores from the Participation Index which it was designed to monitor.

b) Needs Satisfaction Index

The modified Porter instrument requires twenty-six responses, each on a seven-point scale. Three scores could be obtained;

(1) The thirteen responses relating to perceived personal needs satisfaction, which were to be aggregated and analysed as a variable. For purposes of the computer programme, this particular score was to be designated PSNOW. High scores on this variable would be indicative of a high degree of personal needs satisfaction.

(2) The thirteen responses indicating ideal personal needs satisfaction were similarly to be aggregated and regarded as a variable. For the purposes of the computer programme, this particular score was to be designated PSSHOULD. High scores would indicate that

the respondents felt that needs satisfaction in the job ought to be high.

(3) By subtracting the aggregate of the ideal response from the aggregate of the perceived response, the degree of actual satisfaction for the individual could be assessed. The resultant figure was to be known as the **Needs Satisfaction Index.**

This is an individual score relating to the respondent teacher's perception of the difference between the way things are and the way they ought to be. It would not matter whether the teacher had high or low expectations, the perfect score for that individual would obtain when ideal and actual co-incided, that is, a score of zero. The greater the divergence from the ideal, the less the degree of satisfaction. Because actual conditions rarely approach the ideal, it was assumed (correctly) that most if not all scores would be negative. The least satisfied respondents would be those with the highest negative scores. For purposes of the computer programme, this particular score was designated SATISF.

As a result of the testing, the Needs Satisfaction Index would indicate the extent to which it would be possible to identify respondents who were comparatively high or low for this variable.

c) <u>Professionalism</u>

The scoring of Corwin's Professional Role Orientation Scale was to follow the original method, namely, the aggregation of the response scores for individual items. For purposes of the computer programme, this particular variable was designated

PSOTOT.

Low total scores would be indicative of high professionalism and high scores of low professionalism.

d) Participation Index

As with the Porter instrument, three distinct scores could be calculated:

(1) The aggregate total of those items which indicate whether a respondent saw himself as participating provided one score. For purposes of the programme, this score was designated PPDOPART. A low score indicated little perceived participation, a high score, high involvement.

(2) The aggregate score of those items indicating a desire to participate were similarly treated. This score was designated PPWISHTO.

(3) The difference between perceived participation and desired participation represented the Participation Index. For purposes of the programme, this was designated PPDIFF.

In the original Alutto-Belasco instrument, it was assumed that negative scores indicated deprivation, scores approximating to zero represented equilibrium and positive scores indicated saturation with respect to involvement in decision. This assumption could not be made with regard to the test instrument of the experiment, since the items chosen were those indicating the greatest divergence of participation by pilot respondents. The expectation was that most scores would be negative (this proved to be so). It follows that the highest negative scores

would represent those teachers in the sample who felt themselves to be most deprived in terms of desired level of participation. Scores close to zero would be indicative of participation near the desired level.

STATISTICAL ANALYSIS

The SPSS computer programme provides the analytic techniques needed to test the fifteen hypotheses. The analyses required are as follows:

a) Hypotheses 1-3 compare schools with respect to the dependent variables. Differences between school mean scores will be tested using single factor analysis of variance.

b) Hypotheses 4-6 compare size, environmental and country of origin sub groups. Again, differences between mean scores will be tested using single factor analysis of variance.

c) Hypotheses 7-9 identify the correlation between dependent variables by school. The Pearson product-moment correlation co-efficient will be used to determine these relationships.

d) Hypotheses 10-12 relate individual characteristics to the dependent variables. Differences between mean scores for each variable will be tested using single factor analysis of variance.

e) Hypotheses 13-15 indentify the correlation between dependent variables. The Pearson product-moment correlation co-efficient will be used to determine these relationships.

Significance

For all statistical tests the criterion for significance

is =.05.

Reliability

Reliability for each test question and for internal consistency of test instruments will be computed using the Cronbach's Alpha Technique provided in the SPSS programme.

SELECTION OF THE SAMPLE

As indicated, a requirement of the study was that the sample be large enough to enable generalisations about comprehensive secondary schools and the teachers in them to be made. At the same time, the size of the sample would have to be limited by the practicalities of the research. The number of school visits and the number of interviews possible would have to be related to the time available. The location of the schools in the sample would be determined to some extent by proximity to the researcher.

SCHOOLS

Arbitrarily, it was decided that sixteen schools would be possible and these would constitute a sizeable and representative sample. It was also decided that the sample would be half English and half Western Australian in order to reinforce the validity of any comparative conclusions drawn.

The selection of sixteen schools was to be by random procedures with the following exceptions:

(i) the list of schools from which the sample was chosen was limited to government comprehensive schools

and by reasonable proximity to Bath in the county of Avon, England, and Perth, Western Australia. (The maximum distance of the schools finally included was about seventy miles);

(ii) any school in which the headmaster had not been incumbent for more than a year was not included in the selection list. (In the event, because of inaccurate information, one English school chosen had a newly appointed head.);

(iii) any chosen school that did not wish to participate was excluded. (One English school declined and was replaced by another random selection.)

All comprehensive secondary schools that fulfilled these requirements were listed alphabetically and selected schools were those indicated by the application of a table of random numbers.

TEACHER RESPONDENTS

It was decided to seek a one hundred per cent response rate. From the schools in the study, this represented a possible one thousand and twenty-one teachers. The actual number of respondents, seven hundred and fifty-nine, could be regarded as a satisfactory sample of teachers from comprehensive secondary schools.

INTERVIEWEES

The number of interviews possible would be limited by the time available. A total of six interviews per school

was fixed upon: over sixteen schools this would provide ninety-six separate interviews.

Policy making is exemplified by the participation of persons holding a variety of status positions and the inclusion of various levels in the hierarchy was seen as important. The inclusion of the headmaster was not only important, it was politic. Co-operation depended very much upon acceptance of the investigation by the head. Indeed, in the circumstances of the status position of the researcher, it was unlikely that the head could be excluded.

This left five other subjects to be selected. It was decided arbitrarily that two should hold middle management positions, such as head of department or housemaster, and three should hold classroom level status. This stratified selection was to be made by random means to prevent the possibility of a biased sample. Certain teachers were to be excluded on the following grounds:

(i) that, having been selected, they asked to be excused. There was no wish to have an unwilling witness. (It transpired that not one teacher selected refused to be interviewed.);

(ii) that teachers who had not been in the school more than a year were to be passed over since they may not have known the answers to all the questions;

(iii) that in the event that two teachers from one subject department were selected, the second was to be passed over since a broader spectrum was desired.

The sample was to be drawn by lots from the staff list using random numbers.

THE SELECTED SCHOOLS

Some feature details of the sixteen schools are given in Table 4.

Schools are numbered for identification, those from 1 to 8 being English and from 9 to 16 Western Australian. Three of the eight English schools cater for the lower and middle but not the upper school classes (numbers 1,5,6) and one covers the middle and upper school classes (number 7). The remaining four teach Form 1 to Form 6 classes (numbers 2,3,4,8). In this respect, the Western Australian schools are more uniform, all teaching Years 8 to 12, the five years provided for in secondary education in that State. Secondary education in England generally starts earlier (11+ years) than in Western Australia (12+ years), where primary education uniformly occupies the first seven years of schooling.

A feature of the English schools selected is the greater variety they display. This is attributable to a number of factors. The eight English schools are under the direction of five Local Education Authorities, whereas Western Australia has a centralised administration. The English schools in the sample vary more in size than their Western Australian counterparts. [There have been schools similar in size to numbers 3 (1541 students) and 4 (1796) in Western Australia but such large enrolments have been scaled down as soon as the establishment of new schools made it possible.] The environments of the schools reflect demographic differences. There is no equivalent in Western Australia to the areas served by schools 2 and 4 because high density living is not a feature of the Western Australian scene. Only

IDENTITY NUMBER	EDUCATION AUTHORITY	TYPE OF SCHOOL	ENVIRONMENT, ETC.	STUDENT ENROLMENT	FULL TIME STAFF	STAFF/ STUDENT RATIO	CLASS ORGANIZA TION	STAFF ORGANIZA TION
1	Avon	11-16	Semi-urban, sub-rural fringes of provincial white-colar city	804	45	17.87	Banded	5 tier
2	Avon	11-18	Urban residential mainly.Blue-collar work ing class	829	62	13.37	Mixed ability	5 tier
3	Wiltshire	11-18	Small provincial city. Mixed economy.Mixed population	1541	85	18.13	Cross set for subject choice	5 tier
4	Avon	11-18	Urban and industrial ised inner suburb. Work ing class families	1796	101	17.78	Mixed ability	5 tier
5	Oxford-shire	11-16	Rural but serving large Armed Services Camp	696	39	17.85	Mixed ability	5 tier
6	Somerset	11-16	Provincial manu-facturing town.Largely blue collar clients	1140	57	20.00	Banded	6 tier
7	Somerset	13-18	Residential, largely white-collar	1324	90	14.71	Streamed (no lower school	5 tier
8	Glouces-tershire	11-18	Outskirts of County seat. Semi-rural. Mixed clientele	1073	67	16.01	Mixed ability	5 tier
9	Educ.Dept. of W.A.	12-18	Residential.Largely work ing class	1267	77	16.45	Part streamed	4 tier
10	"	"	Residential.Light industry. Mixed clientele	760	60	12.67	Streamed	4 tier
11	"	"	Residential.Upper middle-class.Fashion-able	1311	90	14.57	Mixed ability	4 tier

Table 4

continued overleaf

12	Educ.Dept. of W.A.	12-18	Rural,semi-urban, manufacturing, serving nearby resort	890	60	14.83	Mixed ability	4 tier
13	"	"	Suburban, blue-collar migrants	1088	80	13.60	Set for dept.'l choice	4 tier
14	"	"	Residential,largely working class	876	62	14.13	Gradually streamed	4 tier
15	"	"	Residential,professional and semi-professional white-collar suburb	930	65	14.31	Mixed ability	4 tier
16	"	"	Residential, blue-collar,working class	1200	85	14.12	Mixed ability	5 tier

Table 4: A Summary of Principal Features of the Sixteen Schools involved in the Experiment

school 12 in Western Australia has a rural environment, whilst the provincial towns are fewer, smaller and more far flung than those in England. Seven of the Western Australian schools (all except number 12) are within the confines of the Perth metropolitan area for which there is no English equivalent. It may best be described as "urban sprawl", with approximately 1,000,000 people living in an area fifty miles by twenty miles. In England, a city with a similar population would occupy only a small fraction of that area. The result of this difference is that the Western Australian schools display a sense of community even when they are part of a large city. The English school system shows a general tendency to variety, the Western Australian system to uniformity.

Differences there may be but there are also noticeable similarities. In both countries, the areas served are typified by socio-economic groupings of parents, industrial and dormitory

districts. School organization, exemplified by student class groupings and the staff hierarchy, show not dissimilar patterns. The staff-student ratio in Western Australia tends to be more generous but is not markedly so, Western Australian school number 9, for example, having a higher such ratio than three of the English schools. Those selected from both countries demonstrate considerable autonomy so that, despite superficial uniformity, particularly in Western Australia, marked individual characteristics are apparent to an observer.

In concluding this chapter it remains to report that the research outlined was carried out as planned. In the final two chapters, findings, conclusions, discussion and recommendations arising from the evidence are given.

CHAPTER 5

RESEARCH FINDINGS

The data has been collected in two discrete forms: one to investigate the institutional dimension, the other the personal dimension of a representative sample of sixteen comprehensive secondary schools. Conclusions about the interrelationships between these two sets of data will be deferred until the final chapter. It must be understood, however, that complete separation of the twin strands of this study is not possible.

With some of the results there is a very fine line between what may be classified as **findings** and what could reasonably be called **conclusions**. The purpose of this chapter is, as far as possible, to present the findings without comment. Conclusions, implications and discussions will be the province of later exposition.

A. The Nomothetic Dimension

The object of this half of the analysis has been to examine the organizational functioning of the comprehensive secondary school. Ninety-six interviews and sixteen weeks of participant observation in a representative sample of sixteen schools form the basis of the information gathered.

Responses to the interviews and observations made during the weeks of participation were summarised school by

school. The summary statements from which the findings are made condense several hundred pages of notes. Within schools it was found that there was considerable consensus and it is claimed that the summaries are consensus statements except where important differences of opinion are noted.

Reference has already been made to the difficulty of achieving objectivity on the part of the observer. In addition to this problem, it cannot be assumed that the perception of any teacher is absolutely accurate or free from personal bias. The limitations of the methodology not withstanding, the claim is made that the summaries are accurate in so far as the methodology allows. Where consensus is claimed, five out of six respondents have agreed. Differences of opinion are stated where they are judged to be important and deleted where they are not seen as relevant. Similarly, items are not included in the consensus summaries if they appear inconsistent with the researcher's observations. Many of the conclusions have the potential for testing against measurable responses of staff to questionnaire items. As will be seen later, there is a high degree of consistency between findings made from interview and observation on the one hand and test results on the other.

POLICY AREA 1: THE CURRICULUM

Appendix G shows a consensus summary of responses. The interviews suggest that the selection of the curriculum and the determination of syllabus are not generally contentious issues; these are recognised as tasks central to the functioning of the school. Those most affected in carrying out curriculum

and syllabus roles are involved in their selection and, in their own opinion, they perform them satisfactorily.

(1) PROGRAMME

In all eight English schools there was agreement that the headmaster had the ultimate responsibility for the curriculum but, in every one of these schools, teachers felt they had considerable influence. In school number 7, the head described himself as "just a member of the Board of Studies" but admitted that he would exercise the power of veto if he felt he must.

In six of the Western Australian schools, the situation was similar, with the principal providing the main stimulus or the power of veto. In schools number 11 and number 16, much was made of consensus or collective decisions. The principals stated that they would abide by the decisions so reached. In both these schools, interviewed staff, including the principals, agreed that the principal's power of veto had not been tried in curriculum matters. There was a feeling that if the occasion arose the veto would be used as in other schools. Because of the structured hierarchy in Western Australia, where senior teachers are Education Department appointees with virtually assured tenure, subject departments become quite powerful within schools. There was a good deal of lobbying, thrust and parry before a final decision was reached, since subject departments tended to attempt to build up their strength by the inclusion of additional subjects and courses. The eight Western Australian principals expressed some doubts about an appointment system firmly in the hands of specialist superintendents who were inclined

to reinforce the same bias as the departments within the schools. Subjects not clearly under the umbrella of one of the recognised subject departments were much more difficult to establish and maintain.

Teachers in all sixteen schools agreed that external factors, such as examination boards and student selection of subjects, played a major role in curriculum determination. On the other hand, schools did not see themselves as entirely impotent and their own initiatives had been a telling factor in curriculum innovation.

Curriculum innovation was particularly noticeable in the Western Australian schools where, in the lower school, so-called 'optional' subjects were encouraged. (Courses designed in the schools must be approved by the Board of Secondary Education.) In school 16, a course in Plastics had been developed by the manual arts department, for example. At the upper school level the proliferation of courses was not so prominent but several of the schools had submitted new Certificate of Secondary Education subjects to the Board. The most original of these was certainly the course in Aeronautics promulgated in school 10. A feature in the Western Australian schools was the school based development of so-called "alternative" courses for Year 11 students not intending to complete Year 12 studies. Alternative courses, which existed in schools 9,12,13,14 and 16, involved the schools in preparing a total programme for the students without special curriculum assistance from the Education Department.

School based curriculum development of a course in humanities was being developed in English school 5 during the

period of the visit. A committee of staff, working in their own time, had spent many hours designing the course and the syllabus material to sustain it.

(2) SUBJECT CONTENT

Responses to questions on syllabus determination must be regarded as highly significant in that all ninety-six interview subjects agreed that within prescribed limits teachers exercise syllabus control. The prescribed limits refer to the requirements that may be laid down either by external bodies (such as examination boards) or by internal formulae or agreement within school departments. Teachers agreed that the material that would be examined or assessed would be covered and to this extent the teacher would fulfil the stipulated requirements. The interesting feature of the answers supplied in both England and Western Australia was the explanation as to how these external constraints were overcome to some extent if the teachers so desired.

In the English schools, teachers tended to obtain the most preferred syllabuses by selecting from among the many alternatives provided by the various examination boards. Use was also made of the opportunity to devise school based syllabuses under the so-called Mode 3 arrangements.

In the Western Australian schools, at the upper school level, the syllabus prescribed for the Tertiary Admissions Examination was generally so wide that teachers could safely omit some parts of the stated syllabus in most subjects and select those items considered most pertinent. At this level also, Certificate of Secondary Education subjects, which were

semi school based, provided an alternative to the Tertiary Admissions Examination syllabuses. In the lower school, a system of internal school assessment, externally moderated, ensured that there was a wide range of material from which to choose.

The interesting common feature is that all teachers interviewed felt that they had some autonomy in the control of subject matter even when the syllabus prescribed was fairly specific. As a teacher from school 5 said, "What happens in the classroom is between my students and myself. At this point I do not feel the constraining influence of some external bogey." The explanation for this phenomenon may be fairly simple. It is in the exposition of subject matter that teachers feel most at ease. Some of the teachers stated that, basically, this was their job, all other tasks being an imposition. Teachers, for the main part, felt confident in the area in which they had expertise and the teaching of subject matter was a most enjoyed part of the task.

Another feature common to all sixteen schools was the comparatively minor role exercised by school heads in syllabus matters. This is not to imply that school heads did not investigate, did not sit on syllabus committees, did not exercise the power of veto: they did all of these things. What was clear was that they did not dominate. Frequently, they had no expertise in the discipline under discussion. Syllabus control was exercised within subject departments by teachers and discretionary application of the syllabus was a feature of the individual classroom.

The subject syllabus, as such, appeared not to be a contentious issue.

POLICY AREA 2: SCHOOL ASSESSMENT

Appendix G2 indicates the summary of responses. Staff recognised school assessment procedures as an integral part of policy and generally felt that control was a jointly shared resonsibility. No special difference was evident between the sample schools in England and those in Western Australia.

Interviewed teachers were not specifically asked about reporting procedures but discussion showed this to be generally regarded as almost synonymous with the concept of assessment, certainly part of it. None of the Education Authorities dictated the format of reporting although they may have printed standard report forms which schools tended to use. It is possible to draw the conclusion that despite a certain degree of uniformity, schools had autonomy in the method and timing of reports, as a result of which, variations occurred from school to school.

(1) PROCEDURES

Three of the English schools (6,7,8) regarded their marking system as "traditional", by which was meant an 0-100 scale with 50 seen as the pass mark. This was generally adopted also at the upper school level in Western Australia. At the lower school level there, where internal assessment operated, a variety of schemes was in vogue, the most common being the reporting modes favoured by the Board of Secondary Education which controlled the award of the Achievement Certificate at the end of the first three years of secondary education.

In twelve of the sixteen schools, staff agreed that either classroom teachers had the most say in determining procedures

or that subject departments or senior subject teachers, in consultation with their staff, did.

In school 7, staff elected to retain traditional methods and this was endorsed by the Board of Studies, which theoretically controlled assessment.

In Western Australian schools 9 and 15, the principal appeared to have determined the procedures even although staff did not complain of being unable to contribute to the decisions made. There was no suggestion that they resented the over-riding powers of the principal in this area because they felt that the guidelines were not really restrictive. Of all sixteen schools, number 9 was the one where staff were vaguest about what happened, suggesting that perhaps assessment procedures just occurred along lines that were firmly entrenched without a written prescription.

School 16 was divided into sub-schools which were autonomous with respect to assessment procedures. Staff and principal agreed that the principal exercised leadership but he did so in a way that did not lead to a standard school method. Each sub-school had an assessment policy not necessarily akin to that of the other sub-schools.

It appeared that, no matter how dominating the role of the principal, staff were firmly in control of assessment because, as with the curriculum area, policy was carried out at the point of contact between staff and student. Where the principal saw himself as deciding (as in the case of school 15), he also saw himself as having widespread staff support, a point with which interviewed staff concurred. Perhaps in the mechanics of assessment the school principal is a little too remote from

the area of actual control to exercise anything other than indirect influence and senior department teachers appear to have g:reater influence.

(2) CHANGE

The potential for change did exist in all sixteen schools but modification to the assessment procedure was difficult because of the complexity of operation. Traditional assessment styles died hard, not only because they were valued for their own sake but because it was widely recognised that staff, students and the public had a vested interest in them. The interviews suggested that change would be unlikely to occur without a large proportion of teachers being in agreement. Even in schools, such as numbers 1,7 and 11, where senior or special resonsibility committees dealt with proposals for change and would either initiate them or react to them, this was seen as an area of teacher involvement and extensive teacher interaction would be sought. In cases where subject departments or sub-schools were seen as autonomous, or partly so (such as within schools 6,8,11,14 and 16), it was felt that consensus amongst the teachers concerned was a necessary prerequisite for change. Nothing in the interviews suggested that a senior subject teacher or headmaster would demand a new procedure without staff support. A further conclusion is that the leadership skills of senior staff must play a prominent part in any move to modify assessment.

One clear implication was that assessment is subject to intensive negotiation partly because of inter-departmental rivalries. Subject departments are hard to convince when the

initiative for a move comes from another department. All proposals for assessment are viewed in the light of the subject being evaluated and common ground between subjects is not always easy to find.

POLICY AREA 3: STUDENT WELFARE

Appendix G3 indicates the summary of responses. The interviews pointed to a noticeable difference between practices in English and Western Australian schools and also indicated the extent to which the degree of the formalisation of welfare programmes was an issue, particularly in Western Australia.

The English headmaster had more autonomy than his Western Australian counterpart with respect to both the appointment of staff and the allocation of the senior positions that existed. He had a decisive say in all new appointments and could allocate senior positions according to a system that allowed him to vary the number of high or low status responsibility positions. This was at its most ideal when a foundation headmaster appointed his entire staff and worked out his desired responsibility positions, as occurred in school 5. It was less than ideal when a school evolved as a result of an amalgamation and status positions were promised to all senior teachers from the amalgamating schools, as happened in the case of school 6. From the English headmaster's viewpoint, it was also undesirable when firmly entrenched incumbents held down positions seen as redundant. This was evident in school 3 where the head was new and could foresee a lengthy period of adjustment to the number and nature of status positions. Nevertheless, welfare status positions existed in each English school in the sample and formal welfare programmes were in operation.

English schools regarded formal welfare structure as the norm and only teachers in new schools could remember how the decision to initiate the programme was reached.

By contrast, in Western Australia most teachers of even quite short standing were able to describe the efforts of the school in groping towards a workable formal welfare structure. The main reasons for such programmes being so recent and so comparatively haphazard were to be found in the promotion and appointment procedures of the Education Department.

The Western Australian high school principal had no say in the appointment of senior staff and very little influence over the promotional positions that operated in his school, all appointments being made centrally. The promotional structure in the State was dominated by the need to staff outback and isolated schools and nearly all first appointments to promotional positions were to such places. Subsequent appointments to more desired locations were by transfer arranged on a strict seniority of status basis. The positions that existed were also determined by the Department. At the time of the investigation, no promotional positions below the level of deputy principal existed for welfare type tasks. The vital promotion in the Western Australian situation was to the position of senior master/mistress, the equivalent of the English head of department. All such positions were described in terms of subject expertise. All higher promotions were dependent upon the candidate having held this status. As a result of this system, subject academic roles dominated and welfare functions were subordinated. The provision of specialist welfare staff was formally arranged, each school having a Guidance Officer

who was a specialist psychologist, a Youth Education Officer concerned with the transition from school to work, and a Nurse. None of these specialists had any status in the school hierarchy but worked as support staff. Attempts by schools to organize formal welfare structures allowed some teachers to be awarded temporary responsibility allowances but their number was strictly limited by the Department and they carried no official recognition in terms of status. Within the school such teachers held subordinate positions to the official promotional appointees. In a recent report (Nott, 1979), it was recommended that substantive positions of senior master/mistress for pastoral care be established and that schools be fully involved in decisions about the nature of the positions to be advertised. The Education Department has yet (August 1982) to implement these recommendations. Despite the lack of significant support, the fact that all eight Western Australian schools exhibited some response towards the formalisation of student welfare programmes was indicative of an awareness of a need to provide for other than the strictly academic wellbeing of each individual student.

In some ways, school 16 was an exception to these conclusions about the Western Australian system. Despite Education Department constraints, this school contrived through its sub-school system to give internal status (sans Department recognition) to its sub-school heads who, for school purposes only, had predominance in welfare matters, at least over officially appointed senior subject teachers. It is believed that this school alone of the Western Australian sample can be considered to have had a five-tiered staff hierarchy, a situation which was the rule

rather than the exception in the English schools examined.

Two common patterns of formal pastoral organization were in vogue: a vertical arrangement typified by the House system, and a horizontal structure, usually a Year system but sometimes in groups of years. Of the eight English schools three, numbers 2,4 and 8, had vertical organization; three, numbers 3,6 and 7, had horizontal; and two, numbers 1 and 5, had elements of both. Of the Western Australian schools, none had a horizontal arrangement; four, numbers 10,12,14 and 16, had a vertical structure; and four, 9,11,13 and 15, had no formal pastoral structure although they did organize their schools vertically for sporting contests.

Two of the eight English schools had their welfare organization determined for them by their "purpose-built" nature. One, number 8, was built with Houses as physically separate buildings. Another, 5, had semi open plan buildings which naturally lent themselves to a Year system, although this is one of those schools described as having elements of both structures.

An interesting and important feature of the English school welfare organization was the status of the teachers in charge of the programmes. Almost without exception, the year masters or house masters or the heads of upper school, or whatever the pastoral co-ordinators were called, had a status advantage over the senior subject teachers. By contrast, in Western Australia (as already explained), pastoral co-ordinators, when approved by the Education Department, were temporary appointees with a salary allowance significantly below that of senior subject teacher. It appeared that co-ordinating functions rather than subject department functions played a more dominant role in the English

school.

The welfare role of the individual class teacher or tutor was more clearly defined in English schools than it was in Western Australia. In the English schools of the sample, most form teachers or tutors met their pastoral groups daily (except perhaps on those days when assemblies were held), whereas in Western Australia such meetings were haphazard and, in some cases, did not occur except on rare occasions for organizational purposes. Many of the English teachers stated that they were conscious of serving two masters, that they were aware of the need to fulfil a welfare role towards a small number of individual pupils each of whom they knew very well, whilst at the same time teaching their subjects in the classroom. A number admitted that there could be a conflict of interests between these tasks, that it was sometimes difficult to be a member of two teams with two supervisors, each of whom had different expectations but that, by and large, there was no real problem in co-ordinating the two roles.

(1) WELFARE ROLES

In all the schools, the arrangements, whether formal or informal, were aimed at promoting action initially by the teacher at the point of contact with the student. The more formal English arrangements had a structured hierarchy for referrals and much less use was made of the deputy principal for behavioural problems than was the case in the Western Australian schools. General counselling in the English schools, when referred beyond the classroom teacher or tutor was, for the main part, handled

by the senior welfare teachers such as house or year heads. In the Western Australian context, referrals, generally by a deputy principal, were to specialist psychologists, youth education officers or school nurses. The difference in emphasis is shown by the fact that not one of the English schools had a psychologist identified as such on its staff list, whereas even the smallest of the Western Australian schools did. The English schools had limited access to educational psychologists attached to the Local Authorities.

A number of interviewed teachers below the rank of deputy in both systems questioned whether they ought to have a formal welfare role. These teachers acknowledged an informal responsibility for welfare but they saw their main task as being subject orientated. To teach the subject well was, in their opinion, catering for their share of the needs of the child. The majority of those interviewed did not subscribe to this view but most found the dual role of welfare and subject teaching demanding. The English teachers frequently stressed the aspect of having to serve two masters. Western Australian teachers clearly gave the welfare role second place, perhaps because of lack of definition of function or absence of intermediate senior staff.

In the opinion of the investigator, there were some outstanding provisions made for student welfare in both systems, schools 2,5,12 and 16 being pertinent examples. Other schools in both systems did not appear to manage this aspect nearly so well, particularly those in Western Australia where arrangements were of an 'ad hoc' nature.

(2) THE DECISION ON WELFARE PROCEDURES

Where it was possible in the English schools to identify decisions that brought about the welfare programme, the leadership of the head was stressed. Staff at all levels in schools 4 and 5 made this observation and agreed that the head's role had been dominant. In the comparatively new school, 8, staff attributed the decision of the County to build "Houses" on campus as a greater determinant than that of the headmaster's influence. School 6 suffered from an amalgamation procedure in which welfare tasks had been assigned to senior teachers to maintain their status. The arrangements in this school appeared to be less clearly defined than in others of the sample. Welfare systems in the English schools tended to be regarded as traditional and were ratified by the acceptance of staff.

The situation in the Western Australian schools was entirely different. Recognition of a need to adopt a formal programme of student welfare had been a more recent phenomenon. This enabled staff to describe negotiations that had taken place. In all eight schools there had been considerable dialogue.

In four of the schools, 10,12,14 and 16, formal programmes operated. There was no doubt that in each one the principal had played a leading role in the decision. Interviewed staff in school 10 agreed that the principal alone had decided and imposed the framework.. The principal, incidentally, denied this. In school 12 the principal and staff agreed that the former had led the latter into accepting arrangements for a House system. School 14 displayed some resistance to further staff involvement but they did agree to adopt a House system at a meeting at which

the principal was the leading proponent of the scheme. In school 16, the main impetus was provided initially by the principal but staff at every level were involved in the decision.

The remaining four Western Australian schools were characterised by some reluctance to formalise their arrangements for student welfare. These four schools had discussed the problem at length and, in each case, the principal was in favour of a structured organization, a move resisted by staff. School 15 was still in the process of deciding at the time of the investigation.

POLICY AREA 4: ORGANIZATIONAL STRUCTURE

The summary of responses is given in Appendix G4.

The perceived involvement of staff in organizational structure varied considerably from school to school. In some, such as 4 and 10, the head was generally seen by staff as autocratic and most important decisions were his. At the other end of the scale were schools like 2 and notably 16 where staff felt heavily engaged in helping shape the organization. The interviewer did not conclude that in any of the schools totally autocratic conditions prevailed or would have been possible. Whilst it was clear that some schools were more autocratic than others, what emerged was that extensive consultation occurred before important decisions were made. Reference to the two specific questions confirmed this generalisation.

(1) DECISION ON CLASS GROUPING

In the sixteen schools a variety of arrangements for

placing students in classes obtained. A rationale for the existing system was argued in each school, with recognition of the fact that there was a case for a different pattern. One certain way to strike up an animated discussion in a staff room was to state the case for or against mixed ability or streamed classes, since this was (and remains) an area of some controversy.

Only two schools, one English (7) and one Western Australian (10), employed a fully streamed organizational pattern. Such an arrangement was justified on two main grounds. One that it promoted competition, high standards and academic excellence; the second that it enabled teaching of the homogeneous group to be carried out at the level at which the students were capable of learning.

In eight of the schools, 2,4,5,8,11,12,15 and 16, mixed ability was the official policy with some exceptions in mathematics and languages. The case for these heterogeneous groupings was put in terms of equality of opportunity, streaming as a "self-fulfilling prophecy" and social adjustment. On the last point, it was argued that to place all the failures together was to invite socially maladjusted classes with "all the rotten apples in the one barrel". Weaker students were seen to benefit from the influence of their more able neighbours, whilst the able were seen as not being deprived in any way. It was argued that it was "good" for the elite (either intellectually or socially) to mix with the "hoi poloi". The concessions to mathematics and languages related to the nature of the subjects themselves, since the acquisition of skills was achieved at such obviously different rates as to make the task of the teacher so difficult

in a mixed group that all the students (except, presumably, the average) would be deprived.

Two of the English schools (1 and 6) and two Western Australian (9 and 14) employed a system of "banding" as to ability. Banding was an attempt to place students in general ability groups for the subject, such groups being regarded typically as advanced, normal or retarded. The case for this pattern was that it avoided the high level of discrimination inherent in streaming but, at the same time, provided a compromise solution for those who believed that teaching in groups of approximate ability levels was beneficial to the student.

The remaining two schools, one English (3) and the other Western Australian (14), cross set subjects on the timetable to allow for subject department choice as to streaming. Cross setting implies a timetabling strategy which places classes of the same subject on the timetable at the same time. The argument in favour of this arrangement was that streaming or mixed ability classes could be determined by teachers according to the nature of the subject or their own inclinations. Once cross setting of the timetable is organized, timetable changes become difficult, if not impossible. Another difficulty is that it involves sufficient teachers of each subject area to make it work and a high degree of subject specialisation on the part of staff.

The patterns show a considerable variety of organizational arrangements for classes and, even within schools, some variations on the official policy were frequently able to flourish.

The two schools employing streamed organization had long standing traditions to do so and in each there was significant,

but by no means majority, pressure to change the arrangements. These were two schools in which staff saw the principal as autocratic but a number of the respondents (and other staff in general conversation) were quite happy that he should be so with respect to this intricate issue.

In the majority of the schools in the sample, staff were actively engaged in deciding on the placement of students in classes and in policy decisions about whether classes should be mixed or streamed in ability. Once a tradition had been built up, it appeared that although change was difficult, the interaction of staff would have made it possible. In most of the schools the principal would have exercised veto powers over decisions about student placement if he had felt it important but it is quite clear that staff could participate in and influence school policy on this matter.

(2) DETERMINATION OF MEETINGS

The question asked how the number and types of staff meetings were determined. Answers indicated that all sixteen schools (and by implication most comprehensive secondary schools) relied heavily on meetings to plan, evaluate and implement their programmes. The whole of staff meeting was common to all the schools, although its frequency and function varied. In the larger schools of the sample, meetings of the entire staff were infrequent and tended to be for the dissemination of information rather than for discussion purposes. In such schools, a common remark was that staff discussion, when attempted, tended to be dominated by one or two individuals who used the meeting

as a sounding board for some real or imagined dissatisfaction. The general opinion was that there were usually other appropriate platforms for grievances to be aired. Meetings of the whole staff were more regular and felt to be more effective in the schools with fewer than seventy teachers, a category into which nine of the schools fitted (1,2,5,6,8,10,12,14 and 15). In the very smallest schools, principals and staff spoke enthusiastically about the whole of staff meetings. Full staff meetings were generally arranged by the principal, frequently on a regularly timetabled basis. In most cases the principal supplied the agenda but, in many, staff were invited to suggest agenda items.

Committees proliferated throughout the sixteen schools, their number and purpose varying. It was clearly felt in each school that there was one dominant committee. In some, this was known loosely as the Senior Staff Meeting but special appellations, such as Board of Studies, Steering Committee, Management Team and others, abounded. There was a marked difference between the composition of the senior staff team in England and that in Western Australia, a situation brought about by the nature of the status hierarchy. The membership of the English senior team tended to be above the rank of subject senior, in other words, those who played co-ordinating roles, the principals, the deputies, and the various "directors" or "heads". As noted, the Western Australian schools did not have a third tier of co-ordinating teachers and the senior committee comprised principal, deputy and subject seniors. The English senior committee was likely to be smaller than its Western Australian counterpart. Several of the Western Australian teachers complained that the

senior staff meeting was too large to be effective, particularly in schools where teachers without official promotional positions, such as librarians, housemasters, guidance officers, were included. (Principals justified such inclusions by averring that subject teachers were too concerned with their own sectional interests and overlooked significant functions of the school in their discussions.) Interviews made it clear that those who were part of the management team jealously guarded their right to belong and valued the contribution they were able to make.

A second type of committee common to all schools was the subject or department committee. This addressed itself to the planning, organizing and implementing of teaching in a specific subject area within the parameters laid down by school policy. The frequency and agendas of these meetings appeared to depend upon the senior subject teacher. The meeting was provided for in some schools where it was timetabled but, even where it was not, staff in each school in the sample indicated that such meetings were held on a reasonably regular basis.

Although no other type of committee was common to all schools, each had various special purpose committees, such as finance, school hall management, and so on. Similarly, all schools in the sample called temporary ad hoc committees for specific tasks, such as planning a new subject syllabus, deciding on a major purchase, organizing a special day and the like.

POLICY AREA 5: THE TIMETABLE

The timetable is a sensitive area in the minds of most teachers. The view of one English respondent: "You can

forget all your other questions; this is the one that really determines how the school works!" was echoed by many of those interviewed. Timetabling is a complex exercise and in not one of the sixteen schools was it seen as being arrived at without negotiation. Discussions on timetabling clearly showed a devolution of authority, with the headmaster likely to play an advisory rather than a determining role. The person or persons who compile the timetable are widely seen as powerful figures with whom staff at all levels negotiate extensively.

The summary of responses from the sixteen schools is given in Appendix G5.

(1) DETERMINATION OF SCHOOL TIME

A number of the schools, by conscious decision or not, maintained what was regarded as the traditional school day. In England this referred to a five-day cycle of seven forty-five minute periods; in Western Australia, a five-day cycle of eight forty minute periods. Such a school day in either country was three hundred and twenty minutes long, the additional time in England being taken up by the daily 'form' period. The three hundred and twenty minute day was prescribed by Regulation in Western Australia but the length of day varied in the English schools, three hundred and twenty minutes being the most common. The interviews made it clear that in a number of the schools employing the traditional pattern, alternative arrangements had been considered.

The English schools in the sample tended to be more innovative in their timetabling than their Western Australian

counterparts. Three of the eight English schools, 1,4 and 6, had accepted the seven period pattern without any recent challenge. One using the traditional formula, school 2, was in the process of a review. Four had quite different arrangements, a three-period day, school 5; a four-period day, schools 3 and 8; and a six-period day on a ten day cycle, school 7. The trend seemed to be for longer rather than shorter periods. Of the Western Australian schools, six (9,10,13,14,15 and 16) followed the common pattern and two (11 and 12) employed the double period to the point where they had virtually a four period day with some half periods of forty minutes.

The English schools also appeared more willing to vary the time given to each subject. The explanation for this seems to lie partly in the fact that rivalry between subject departments was less obvious in the English schools because of the role of the co-ordinating non-subject senior staff, and partly because of the influence in Western Australia of a report recommending equal time to be allocated to the core subjects in the lower school (Dettman, 1969a). The length of time given to various subjects was not an issue in the interviews.

In schools where variations from traditional patterns in the allocation of time occurred, considerable negotiation took place and it was not a decision handed down by the headmaster. Stimulus for variation appeared to stem from different parts of the school, with the issue well aired before any change occurred. In all six schools deviating from traditional patterns, changes came about as a result of staff pressure which the head, in each case, interpreted as a recommendation which he accepted.

(2) ALLOCATION OF TEACHERS TO CLASSES

Responses to the question about how staff teaching assignments were determined revealed a trend in the sixteen schools of the sample. Staff generally did have some say in the determination of the classes they would teach, despite the obvious observation that the person or persons who constructed the timetable were in positions of considerable power. The typical method described was for the subject department head to recommend who would teach which classes. Interviewed teachers of classroom level status indicated that they felt close enough to the senior subject teacher to believe that they could influence the decision. The timetabler attempted to piece the recommendations together and in so doing, he may have had to undertake a few minor adjustments to make them fit. These minor adjustments were frequently the subject of disputation. Every one of the sixteen principals regarded the timetable as an area over which he or she had special sovereignty and, without exception, paid close attention to it both during construction and in its operation.

In some of the schools, staff felt they had little influence over the final shape of the timetable. Whilst not one interviewed teacher said he had not been consulted, staff in two Western Australian schools (10 and 15) and one English school (1) felt that they had little say in the matter of their ultimate teaching load. In such cases the decision was attributed to the timetabler who was sometimes dominated by the headmaster, as was the case in school 10.

In one of the schools (1), the headmistress had constructed

the timetable herself. She regarded such a situation as atypical in that special circumstances involving staff change had forced her to perform what she did not regard as her normal role. It is interesting to observe that, of the sixteen schools, staff appeared to be more critical of the actual composition of the timetable in this school than would seem to have been the case in any other sector of the sample.

The principal of Western Australian school 16 described himself as the arbitrator in timetable negotiations.

POLICY AREA 6: SCHOOL ETHOS

Of all sixteen schools, only one, number 5, the smallest and most rural of the English schools, had attempted to define its ethos in written form. Teachers interviewed found great difficulty in being specific about what was actually happening in this policy area. Discussion revealed considerable concern on the part of teachers at all levels that the school should stand for, promote and uphold the desirable standards of society. The problem was one of identifying what those standards were. The interviewer sensed a wide degree of latitude and ambivalence on the part of staff generally. It was obvious that in most schools the value system was a most complex combination of community environment, teacher expectations and student response. Where the principal or other very senior teacher gave a positive lead, this appeared to have considerable effect. In school 16, for example, where the principal espoused the ideal of democratic participation by his staff but was widely seen as an inspiring leader, all teachers seemed familiar with his stated aim that

adult, civilised behaviour was to be expected and encouraged within a school climate of low tension between staff and students. In this school there was general acceptance of the standards of the home, with behaviour modification where it seemed desirable. By contrast, school 10 enforced its rules strictly, insisted on the wearing of the school uniform, used corporal punishment to reinforce its expectations and relied on "thou shalt not" rules. The principal of this school believed that he should maintain the pattern for a community which he saw as letting standards slip.

The positive effect of the school assembly on the value system of the school appeared evident. The English schools of the sample had regular and frequent assemblies, whereas these tended to be irregular in Western Australian schools. The assemblies in England attempted to contain an element of religious practice and, by virtue of their regular occurrence, it seemed that English schools were perhaps more aware of their corporate attempts to promote values than were those in Western Australia. Despite the fact that English schools appeared more consciously to promote a common ethos, there seemed very little difference in either country with respect to the way in which they established their value systems. Disparities were more conspicuous between schools that inclined towards conservatism and those that tended to be trendy than they were on a national basis.

A clear determinant of school ethos was the leadership role of the principal. The principal (or the principal in concert with one or more senior teachers) was seen as being critical to the determination of ethos in six of the English (2,4,5,6,7,8)

and five of the Western Australian (9,10,11,13,16) schools. The remaining five schools exhibited noticeably greater ambivalence and confusion in identifying their value systems. Teachers in the eleven schools in which the principal clearly led in this area did not say that they subscribed to and universally supported the standards he proposed for the school, nor did teachers in the other five schools suggest that they did not attempt to maintain a set of ideals.

School "traditions" were widely seen as promoting the value system. Such things as the annual speech day in school 1, the prefectorial system in school 10, family groups in the same sub-schools in 2 and 16, the annual cross country runs, the maintenance of the same house names, may seem trivial in themselves, but they helped to ensure that staff and students developed a sense of identity with the school. Teachers in schools with clearly discernible traditions spoke highly of the benefits derived therefrom.

The handing down and maintenance of values was stressed as important. The most oft repeated phrases in this part of the discussion appeared to be "this school believes in....." or "I believe in....." on matters more assumed than discussed. Questions of student morality were commonly raised but it was reported that such discussions rarely reached the formal policy making levels. Individual cases were treated on an ad hoc basis by what were seen as societal standards.

Staff in the sixteen schools seemed uncertain about how to deal with questions involving values other than to judge each case by their own value system. A tendency to avoid making

decisions was evident except in cases where the expectation of the school was clearcut.

The summary of responses is given in Appendix G6. In this instance, the questions proved to be a catalyst to the discussion, which ranged far beyond the original questions, "Who decided on the school rules?" and, "Who determined such matters as dress and behaviour?". For example, in only one of the schools, number 10, did staff feel that students would be familiar with school rules, whilst in seven, 1,5,6,7,8,12 and 16, written rules were non-existent. Uniforms were the exception in Western Australia, since the Director-General had publicly stated that they could not be enforced.

What did emerge from these interviews were the differences between schools. Contrast school 10, where the principal maintained traditional patterns of dress and behaviour, and school 16, where there was no formality in these matters and behaviour patterns were set informally.

POLICY AREA 7: SCHOOL RESOURCES

Where resources were not scarce, their distribution proved not to be contentious in any of the sixteen schools. Where there was competition, considerable comment resulted. A summary of responses is given in Appendix G7.

(1) THE SPENDING OF DISCRETIONARY FUNDS

On the question of money allocations, common patterns emerged. In not one school of the sample did the principal attempt to control every item of expenditure, partly, it is suspected

in some cases, because the task had become too complicated and so many purchases of a minor or recurrent nature are required. In every case, departments or sections of the school had funds made avilable to them to be spent at their own discretion. The critical question thus became, who controlled the allocation of monies from the common fund?

In four of the English (1,3,6,8,) and three of the Western Australian (10,11,14) schools the principal decided how the money was to be disbursed and in five of the seven cases (3,6,8,10,11), staff regarded him as quite autocratic in this respect. In the remaining two schools in this category (one in each country), staff negotiated with the principal before the allocations were made.

Three English (2,4,5,) and five Western Australian (9,12,14,15,16) schools had finance committees which decided allocations. In the three English schools, the headmaster either skimmed his share off the top or he kept the capitation grant to spend at his own discretion before the committee decided on the distribution of the funds raised by parents and students. In the Western Australian schools, the principal put his case for funds to the committee the same as everyone else and at least one principal (school 16) had experienced having his request substantially trimmed by his own finance committee. In another of the Western Australian schools (number 14), staff reported that the finance committee was dominated by the principal and had no real function other than to rubber-stamp his decisions.

One English school remains unaccounted for. This one had arrived at a complex formula involving student hours and

the nature of the subject, and money was distributed according to those variables. The formula had been largely the brain-child of the head, who had experienced serious competition for funds earlier in the school's history. He had arrived at this solution so many years ago, following staff negotiation, that it was no longer an issue and was accepted, albeit grudgingly by some departments.

Fiscal matters were not controversial in the schools investigated. Even in those schools seen as autocratic with respect to fund distribution there was a reasonable degree of satisfaction and most teachers reported that they could carry out their teaching function with the funds at their disposal. This may have been mainly attributable to the fact that teachers knew what finance they had available and budgeted accordingly. In Western Australian schools, where most departmental funds accrue from subject charges paid by parents, departments have some control over the sum they will attract and this may be helpful in alleviating concern about money needed for the purchase of essential resources.

One general finding was that although teachers expected to be involved in decisions about money, provided they could manage on what they were allocated, it was not one of their major talking points.

(2) THE ALLOCATION OF ROOMS

Very little came out of the second question since rooms, once allocated to departments or purpose-built for their use, remained traditionally available to particular subject

areas. In none of the sixteen schools did space loom large as a scarce resource. There were interesting variations on account of different building designs and there were tales of lobbying to establish the right to the use of certain rooms, but no definite pattern emerged. In most cases, schools had little say over the design of the buildings they received from the education authority. Staff accepted the rooms allocated to them by the timetable and, if disappointed, negotiated for a better deal. Principals generally acted as arbitrators in disputes and were usually recognised as deciding initially the uses to which rooms would be put.

In one school where storage space was scarce (number 4), there had been more discussion over lobbying for this need than there had been for classroom or office accommodation.

POLICY AREA 8: STAFF DEVELOPMENT

Statements of school objectives clearly identified staff development as a policy area for the school. Similarly, preliminary discussions indicated an awareness in schools of responsibility towards the objective of teacher professional growth. The discussions held in the sixteen schools of the sample suggested that this tended to be a haphazard, largely neglected task. What appeared to obtain was widespread encouragement for teachers to extend their capacity to perform their duties, largely by their own initiatives, or by attendance at centrally-sponsored in-service courses. The clear result of the interviews in the sixteen schools was an indication that they had neither the staff resources nor the time to manage in-service development

at the school level effectively. A summary of responses is given in Appendix G8.

On the other hand, provision for staff welfare was evident in each school in the sample. Staff comforts and personal needs were provided for and in discussion the question of staff morale was raised frequently. The schools made noticeable efforts to provide good working conditions and various avenues for social intercourse.

(1) IN-SERVICE TRAINING WITHIN THE SCHOOL

Interviewed staff, other than the principal, acknowledged the existence of consistent staff development programmes within only two schools in the sample, numbers 5 and 16. In school 5, this was seen as an extensive activity of the headmaster, who planned programmes and worked regularly with staff in an effort to improve their effectiveness. School 16 had a non-teaching curriculum co-ordinator who provided specific courses within the school on a regular basis. The teacher concerned was not paid by the Education Department, his salary having been found for a period of two years from a grant made by the Australian Schools Commission towards what was classed as an innovative project. There was no expectation that the position, the value of which was acclaimed by staff, would continue beyond the span of the grant. School 1 used the two days allowed by the County of Avon for internal in-service but staff saw this as a planning session for the school rather than something aimed at themselves. Similarly, staff meetings, claimed by a number of the school heads to represent in-service training activity, were not recognised

as such by staff. In one school, number 2, both headmaster and senior staff spoke of the value of an annual review of each department and it was accepted that this was an effective measure in terms of staff improvement. In school 4, a teacher was designated senior staff tutor. This position was acknowledged to be more honorary than real, since staff felt that the tutor's own teaching programme was so heavy as to prevent him from carrying out any more than a nominal in-service role. This tutor was not one of those interviewed but, during informal discussion, he indicated that the best he could do was to spend short and irregular amounts of time with teachers in apparent difficulty. He claimed that this was his expectation of the role, that this was the headmaster's instruction and that his teaching load was too exacting to allow him to play any co-ordinating role in formal staff in-service programmes.

Teachers in all sixteen schools spoke in appreciation of their occasional opportunities to attend externally arranged in-service courses. Despite the inconvenience created back at the school by the necessity to provide teacher replacement, interviewed teachers appeared to agree that, provided the selection of teachers for courses was arranged in fair rotation, it was an acceptable price to pay for the benefits they expected to flow back to the school.

(2) TRAINING FOR THE BEGINNING TEACHER

Formal programmes for teachers in their first year of service operated in schools 2,5,7,9,10 and 16 and in other schools it was required that subject senior teachers assumed

special responsibility for beginners. The impression gained was that provision was haphazard except in those schools where formal programmes had been established. Senior subject teachers varied considerably in their attidude to teacher induction in schools where a formal programme did not involve them. The research design did not provide for beginning teachers to be included in the interview sample but a number of interviewees were not so far removed from their introduction to teaching that they could not recall it. The overall reaction to their personal experiences was that, when they needed help, they had been reluctant to seek it and it had not been readily forthcoming unless they were seen to be having class control problems. Such teachers claimed that it had been for them a case of "sink or swim". This learning by error technique was seen as providing a good foundation for the teacher but was considered somewhat unfair on the pupils they were teaching at the time.

Greater attention appeared to have been paid to the induction of beginners than was the case with in-service training of experienced staff.

POLICY AREA 9: PUBLIC RELATIONS

Two clear facts emerged from examination of the sample schools in this particular policy area. Firstly, that they all made a determined and systematic effort to reach out to their parents and other community agencies and, secondly, that parents played an insignificant direct role in any of the schools. A summary of responses is given in Appendix G9.

(1) WHO IS INVOLVED

In all of the schools the person most involved in public outreach was the principal, and staff readily agreed that his or hers was a major contribution to the school as a community agency. In some of the schools, particularly the less urban (for example, 5,6 and 12), the head was acknowledged as a public figure; he had many contacts which he used advantageously for the school and he played a prominent part in community affairs. Most schools sent out regular newsletters to parents, wrote frequent personal letters regarding student progress, reported on students for potential employers, contributed news items to local and regional newspapers, held meetings to inform parents of school affairs, particularly at times when students needed to make important decisions, held open evenings and participated in outside affairs such as sporting competitions. Most of the heads in the thick of these activities stated that their public relations role consumed more time than it should have and that they felt inadequate to meet its many demands and, at the same time, run the school. Two of the English schools, numbers 1 and 7, had an internally appointed press officer and two of the Western Australian schools, 15 and 16, and one in England, 2, spread the public relations work more widely amongst the staff. In each case they attempted the same functions as those schools in which the head was more dominant in this area.

Respondents spoke almost without exception of what might be called the hidden public relations of the school, the indirect and often quite negative influence of those students who were felt to let the school down, and those teachers who

were seen as not supporting the public image the school attempted to create, and the often malicious community grapevine on the school which was rarely related to its educational programme. Much of the public relations was directed towards gaining confidence and counteracting the effects of these unhelpful hidden agencies. Schools seemed to be aware of a need to promote themselves positively.

(2) THE ROLE OF PARENTS

Parents had nominal roles in some of the schools of the sample. All of the English schools are required by Government Statute to have a Board of Governors but these Boards rarely had many of the actual parents sitting on them, although they were often represented. The Boards of Governors were described as useful support for the headmaster, helpful on public occasions but rarely seen as taking decisions about the way the school would run, with the single exception of their part in the appointment of a new headmaster. Governors appeared to be chosen more for the prestige they would bring to the school than for the contribution they would make to its running.

Two of the schools, one English (2) and one Western Australian (16), promoted themselves as community schools and made valiant efforts to have parents in and around the school both formally and informally. The teachers in these schools reported that the school took most of the initiative, that in both cases the working class communities did use it as a resource centre for their needs but that they made little attempt to influence school policies except indirectly, nor did the machinery

to do so exist.

One of the schools, Western Australian school 15, had a strong School Council which did offer advice to the principal, advice which he said he found helpful. In some ways this school was unique in that, of all those in either country, its catchment area was drawn from the highest socio-economic bracket and many of its prominent parents were academics attached to the various tertiary institutions in the district.

All sixteen schools had parent bodies of sorts but, in each case, they constituted only a handful of the parents they supposedly represented. Without exception, schools reported that the majority of parents did not appear to wish to be involved in this way, although their help was frequently forthcoming when practical assistance was required. Respondents suggested that parents were interested in what their own children did, as evidenced by good attendances at open days or evenings, at school performances and sporting events; that they would support the school in fund-raising but that they did not generally want to be embroiled in decision making. The attitude of most parents seemed to be that the professionals were paid to do this and that they themselves would negotiate on an individual basis if and when the need arose. In one of the smaller English schools, number 5, interviewed staff agreed that although interested parents were led to believe that they influenced the school, in reality the degree of influence was not great. Interviewees were of the opinion that parents were more influential in an indirect manner through their children than they were in any direct way through the formal parent body.

Most staff seemed pleased that the parent bodies did not interfere noticeably in the running of the school and, indeed, recognised the official body as a potential threat to their own capacity to do so. The thought was frequently expressed, both in England and Western Australia, that parent groups could easily fall into the hands of unrepresentative minority pressure groups to the disadvantage of the school as a whole.

A general finding was that teachers rather than parents took the initiative in deciding about school policies but that they were usually responsive to community pressures.

B. The Idiographic Dimension

The object of the second half of the analysis has been to examine some of the appropriate characteristics of the teachers within the comprehensive secondary schools in the sample. Questionnaires were issued to all the teachers and the responses analysed by the techniques indicated in the previous chapter.

Findings for this part of the investigation are dependent upon statistical analysis. The Statistical Package for the Social Sciences programme (SPSS) provides for the data to be stored, sorted and computed. The interpretation of computed results is the main determinant as to whether hypotheses can be sustained.

THE PRELIMINARY STATISTICS

Before attempting to analyse the findings, three statistical procedures testing the validity of the responses were carried out.

a) RESPONSE RATE

For the completed questionnaires the overall response rate was 74.34% (out of a possible 1021 teachers in the sixteen schools 759 answered all or some of the questions).

Particular sub-group responses are indicated in Appendix H "Questionnaire Response Rates for Various Sub-groups".

This overall response rate of 74.34%, although not as high as had been hoped, is adequate in view of the widespread nature and size of the sample. There are always doubts when one potential respondent in four fails to answer. Questions must be asked about why he did not answer and whether the non-respondents represent a particular bias.

Of the specific responses, scores from two schools must be considered suspect, those from school 2 (41.07%) and from school 9 (58.57%).

Responses from urban schools (52.48%) are also low and throw doubt upon conclusions relating to school environment.

The comparatively low response from classroom teachers (66.78%) is offset to some extent by the size of the sample (408 respondents).

In general, the response rate is satisfactory provided that the limitations referred to above are taken into consideration.

b) CORRELATION BETWEEN "OPINION" AND PARTICIPATION INDEX SCORES

The opinion question was used to monitor Participation Index scores. If the correlation between the two scores is high, this indicates reinforcement of the validity of the Index.

Calculation of the correlation between opinion scores

and the Participation Index (PPDIFF) is as follows: six hundred and thirty-six respondents completely answered both parts of the instrument.

$$r = -.41 \; ; \; p < .05$$

This negative correlation is consistent with the fact that a low score on opinion represented satisfaction with the degree of participation whilst a high score on the index measured the least deprivation in participation. The significance of the correlation indicates that the Participation Index is reinforced by the opinion question and, to this extent at least, there is some evidence that that Index does measure the perceived degree of participation of respondents.

c) RELIABILITY OF TEST SCORES

Reliability for each test item measuring personal needs satisfaction, professionalism and levels of participation was computed using the Cronbach's Alpha Technique. Full details of all item scores appear in Appendix I "Reliability Co-efficients for Test Items".

A summary of the reliability scores for test instruments is shown in Table 5.

Reliability, as shown by these statistical results, shows substantial internal consistency both for the individual items and the instruments as a whole.

Since Index scores were calculated from test item scores, it is deduced that the Needs Satisfaction Index and the Participation Index have similarly satisfactory reliability.

INSTRUMENT	ALPHA SCORES OVERALL
Personal Satisfaction	
(i) perceived	13 Item α = .88 ; standardised item α = .88
(ii) ideal	13 item α = .85 ; standardised item α = .85
Personal Orientation	
(i) level of response	16 item α = .62 ; standardised item α = .65
Personal Participation	
(i) perceived	12 item α = .87 ; standardised item α = .88
(ii) ideal	12 item α = .88 ; standardised item α = .88

Table 5: Co-efficient of Reliability (Chronbach's) Alpha Scores for Test Instruments

HYPOTHESIS TESTING

These three tests for validity show that scores may be accepted as generally satisfactory. Whilst some caution must be exercised in view of the 74.34% response rate, particularly the low response from two schools and urban teachers, this is offset to some extent by the high level of reliability of the test instruments and the general size of the sample.

Two of the instruments, those of Porter and Corwin, have been well tried and tested. The third, the measure of levels of participation, has been shown to be consistent in terms of correlation with respondent opinion and to have high reliability.

It is concluded that basing findings on the statistical evidence provided by the questionnaire is a viable proposition.

In each relationship shown to be significant, graphical representations of the scores will be given. For each group

the mean point and the standard deviation of scores are indicated. In every one of these graphs it will be observed that there is considerable overlap of the standard deviations. This means that even when differences in mean scores are demonstrably significant there is still a wide variety of responses within each sub-group. Thus, for example, even although on the first of these graphs (Figure 6, p193), teachers in school 6 are seen to be low on personal needs satisfaction, nevertheless, some of the respondents in the school were quite high for this variable. This serves to emphasise the point that, in the cases examined, general tendencies have been found but that there are exceptions in every case. This particular limitation must be borne in mind in the interpretation of these findings.

Hypothesis 1 (Differences between schools with respect to personal needs satisfaction.)

The relevant statistics are given in Appendix J1 "Statistical Details of Needs Satisfaction Index Scores by School". The Needs Satisfaction Index provides a measure for which the higher the score, the greater the level of satisfaction. The mean scores obtained by respondents in the various schools are shown in graph form in Figure 6 (p193).

It will be seen that schools 5 and 16 scored well above the mean, that is, respondents in those schools demonstrated high levels of personal needs satisfaction. Schools 6, 9 and 13 demonstrated correspondingly low levels of personal needs satisfaction. Even if school 9 is disregarded (on the grounds of its low response rate), it is reasonable to assume that teachers

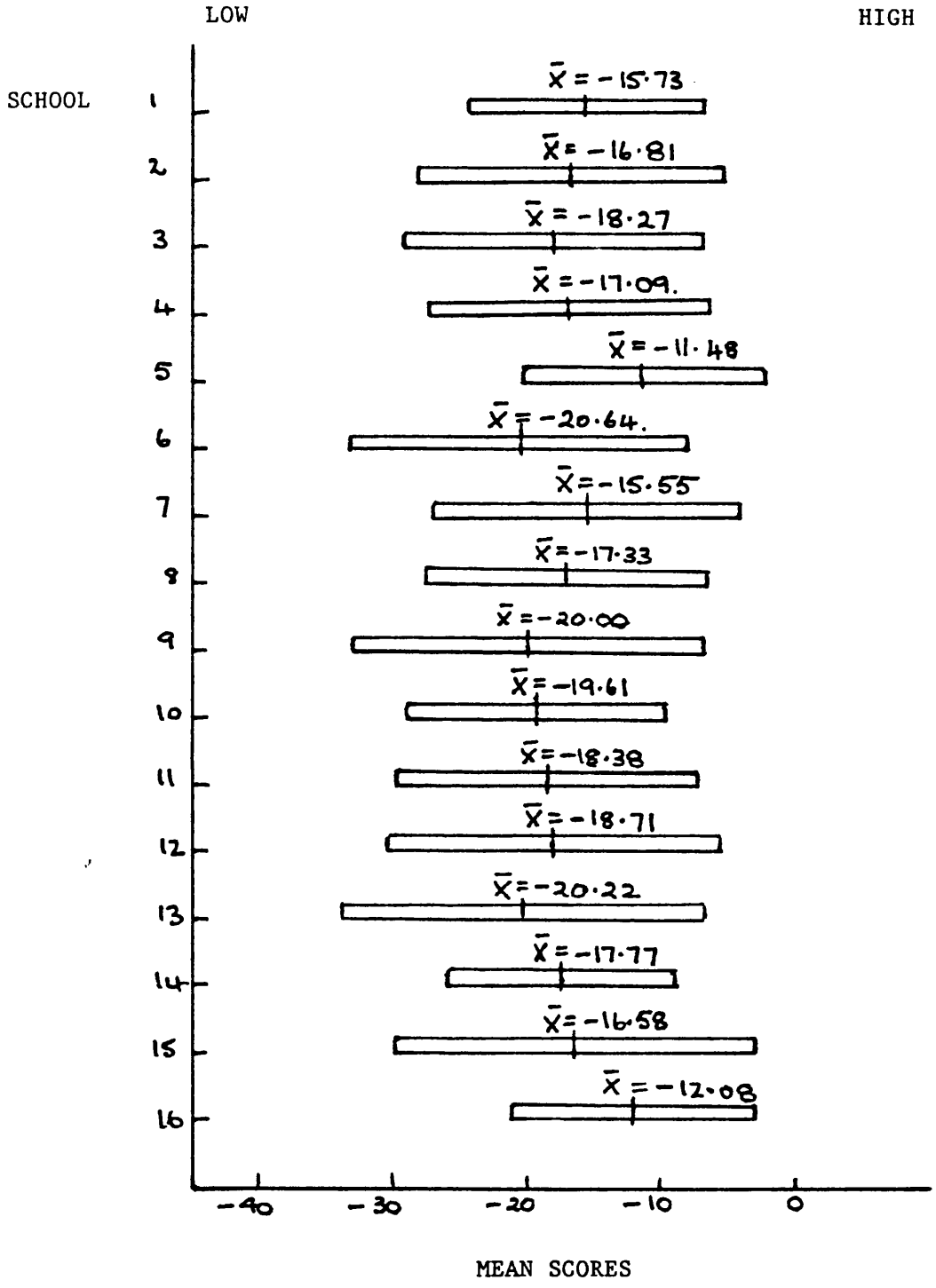

Figure 6: Mean Scores of School Groups for the Needs Satisfaction Index

generally in schools 5 and 16 are considerably more satisfied than the teachers generally in schools 6 and 13.

If such differences are statistically significant, then it can be said that schools do differ with respect to the personal needs satisfaction of the teachers employed in them.

Significance was tested by analysis of variance. The results were as follows:

F Score	p	0.05 level
2.25	.00	YES

Significance being established at the .05 level, the null hypothesis must be rejected. The contrary proposition may be stated, namely

Schools will differ with respect to the personal needs satisfaction of the teachers employed in them.

The Needs Satisfaction Index was used in reaching this conclusion. It is pertinent to note that a similar result is obtained if figures for perceived personal needs satisfaction are used, significance being at an equally high level. Statistical details for this alternative test of the hypothesis are given in Appendix J2 "Statistical Details of Perceived Personal Needs Satisfaction by School". Examination of the figures for this alternative test shows that the same schools scored well above and below the mean for this variable.

The characteristics of schools that appear to account for these differences will be highlighted in the discussions and conclusions of the final chapter, in which the two strands of the investigation are drawn together.

Hypothesis 2 (Differences between schools with respect to professionalism.)

The mean scores and other related statistics school by school for the variable "professionalism" are given in Appendix J3 "Statistical Details of Professional Role Orientation Scale Scores by School."

The Professional Role Orientation Scale provides a measure for which the lower the score, the greater the professionalism. The mean scores obtained by respondents in the various schools are shown in graph form in Figure 7 (p196).

Key schools to examine in this case are 11, 15 and 16 for the most professional school level responses and schools 1 and 5 for the least professional responses. The evidence suggests that the level of professionalism displayed by the teachers is related to the schools in which they work. Again, it must be asked whether these differences in scores are significant.

The results of significance tests were as follows:

F Score	p	0.05 level
4.46	.00	YES

In the light of the fact that significance at the .05 level has been established, the null hypothesis must be rejected. The contrary proposition is

Schools will differ with respect to the professionalism of the teachers employed in them.

Again, the characteristics of schools that appear to relate to these differences will be discussed in the final

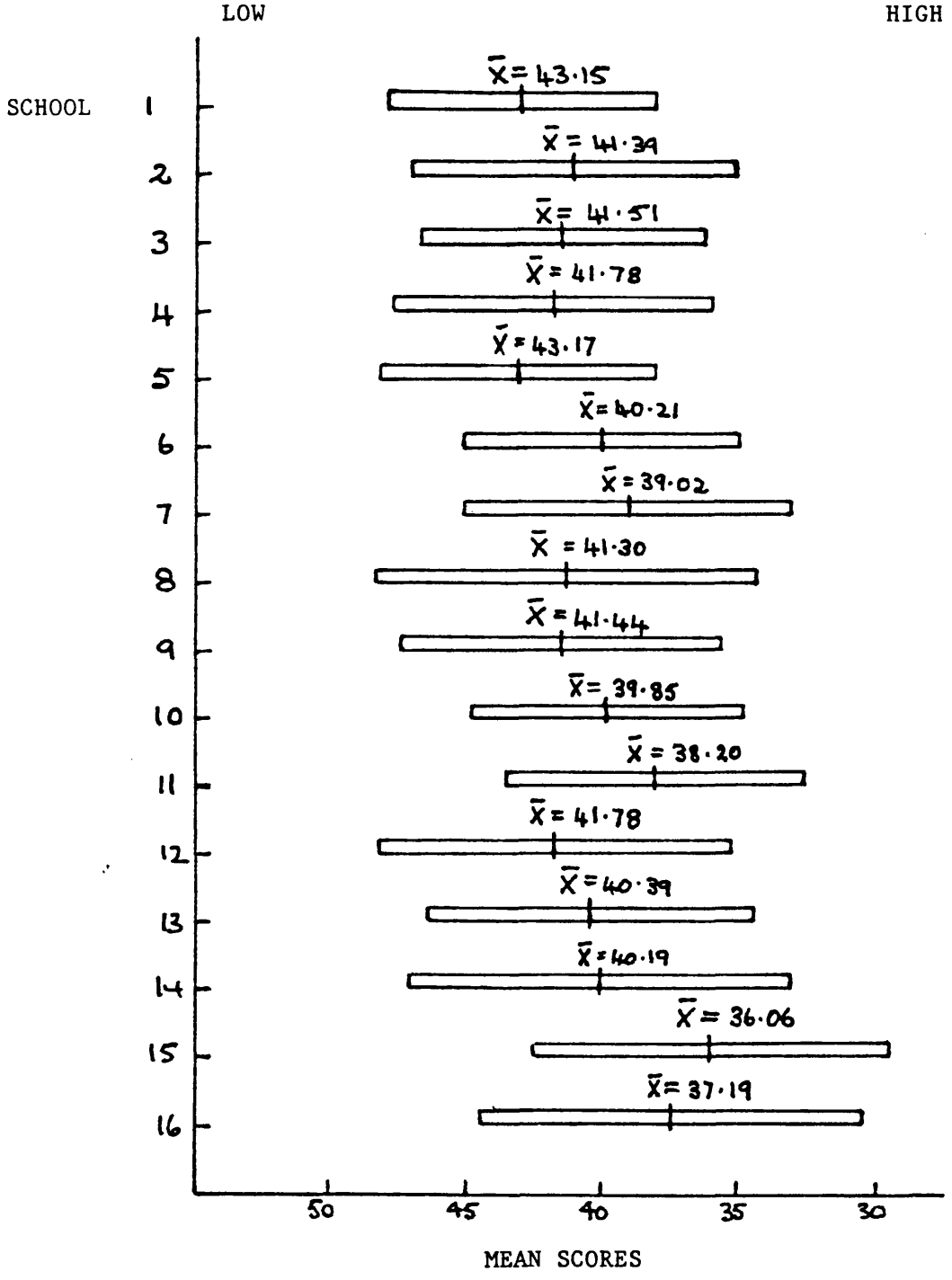

Figure 7: Mean Scores for School Groups for the Professional Role Orientation Scale

chapter.

Hypothesis 3 (Differences between schools with respect to levels of teacher participation in decision making.)

The mean scores and other related statistics school by school are given in Appendix J4 "Statistical Details of Participation Index Scores by School". The Participation Index provides a measure in which the higher the score, the higher participation approaches the respondent's ideal, whilst the lower the score, the greater the perceived deprivation in the level of desired participation. The mean scores of respondents by schools are shown in Figure 8 (p198)

On the scores obtained, teachers in schools 1,2,3,14,15, and 16 felt least deprived and those in schools 7,9,10,11 and 13 most deprived. (Note: Schools 2 and 15 had low response rates.)

The implication of the wide range of these results is that the school in which a teacher works does relate to the level at which he is able to and wants to participate in decision making.

The test for the significance of these differences gave the following results:

F Score	p	0.05 level
2.66	.00	YES

Significance at the required level having been established, the null hypothesis is rejected and the counter proposition stated, namely

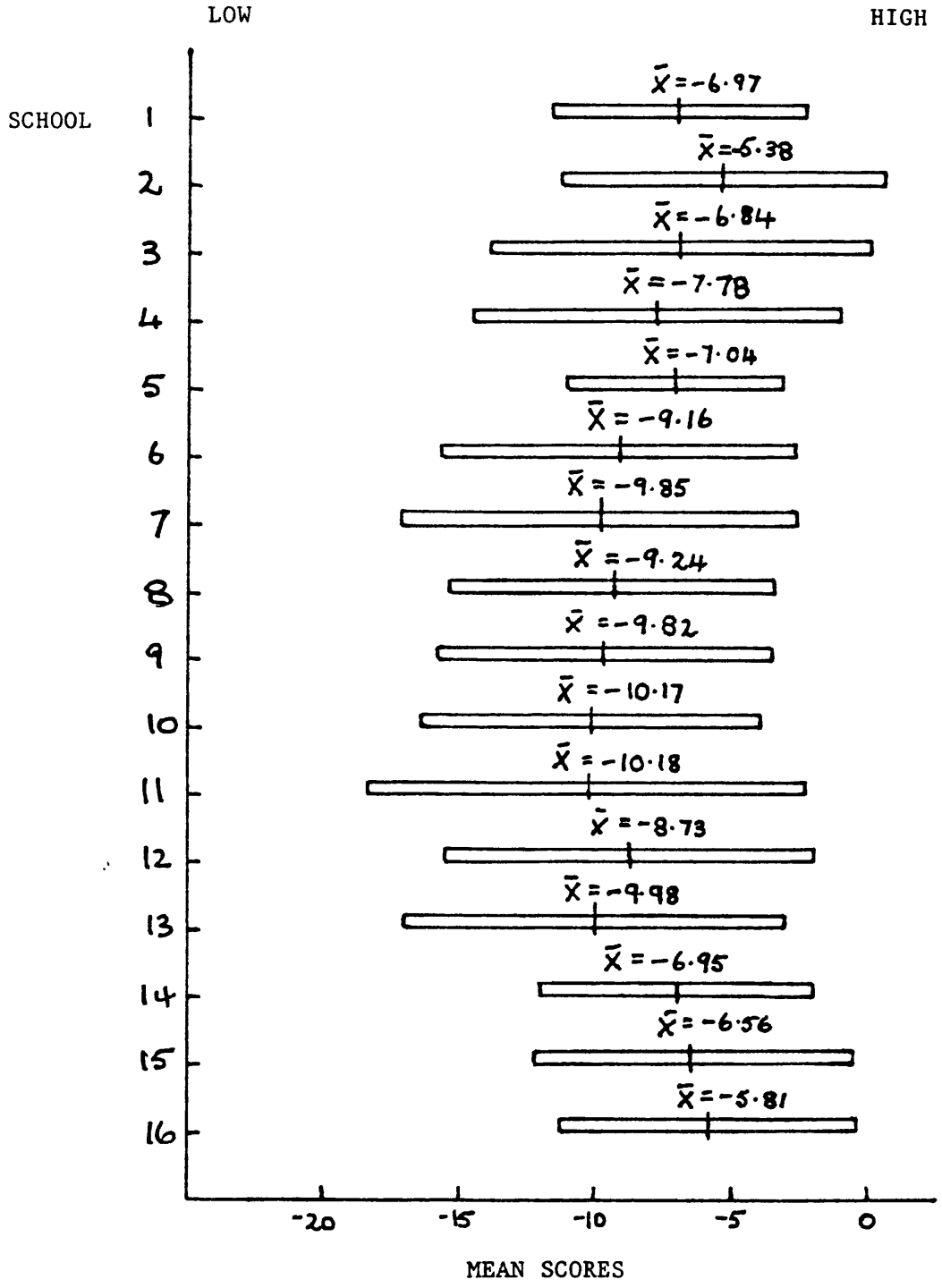

Figure 8: Mean Scores for School Groups for the Participation Index

Schools will differ with respect to the extent to which teachers achieve their desired level of participation in decision making.

Reference to the statistics given in Appendix J5 "Statistical Details of Perceived Participation Scores by School" demonstrates that a similar result would have been obtained had perceived participation rather than the Participation Index been employed, again with a significance at the .05 level.

Such a result leads to a finding that there are significant differences between the particular school and the perceived degree of involvement. Schools with high or low scores on perceived participation also scored correspondingly high or low on the Participation Index.

The particular characteristics of the school which appear to account for these differences will be discussed in Chapter 6.

Hypothesis 4 (The relationship between school size and the measured variables.)

The mean scores and other related statistics according to school characteristics are given in Appendices J6, J7 and J8. The most relevant details related to size are summarised below. It should be noted that schools were classified as being large or small according to whether they had more or less than fifty teachers.

Variable	F score	p	0.05 level	Appendix Reference
Needs Satisfaction	6.62	.01	YES	J6
Professionalism	13.22	.00	YES	J7
Participation	2.99	.08	NO	J8

The null hypothesis is confirmed in part, namely

The size of a school does not significantly influence the achieved degree of desired participation in decision making of the teachers employed in it.

It is, however, rejected in part, the contrary proposition being

The size of a school does significantly influence the personal needs satisfaction and the professionalism of the teachers employed in it.

Each of these significant variables will be discussed in turn.

a) Needs Satisfaction Index

Reference to Appendix J6 shows that the large schools had a mean score of -17.62, the small schools a mean score of -13.75 for this variable. Since this difference is significant at the .05 level, it points to higher levels of satisfaction obtaining in the smaller schools. Reasons for this will be discussed in Chapter 6.

b) Professional Role Orientation Scale

Appendix J7 shows that the large schools had a mean score of 39.94, the small schools a mean score of 42.92 for this variable. Since this difference is significant at the .05 level, it points to a higher level of professionalism in the larger schools of the sample.

The later discussion will question what the Professional Role Orientation Scale was actually measuring and will suggest reasons for the difference between large and small schools with respect to this variable.

Hypothesis 5 (The relationship between school environment and the measured variables.)

Four categories of environment were identified: urban, suburban, rural and sub-rural. Again, Appendices J6, J7 and J8 supply the required statistical summary, the most relevant details relating to environment being as shown in the table below.

Variable	F score	p	0.05 level	Appendix Reference
Needs Satisfaction	.32	.81	NO	J6
Professionalism	7.25	.00	YES	J7
Participation	1.36	.25	NO	J8

The null hypothesis is confirmed in part, as follows:

The environment of a school does not significantly

influence the personal needs satisfaction or the achieved degree of desired participation in decision making of the teachers employed in it.

With respect to the rejected part of the hypothesis, it may be claimed that

The environment of a school does significantly influence the professionalism of the teachers employed it it.

Reference to Appendix J7 shows mean scores on the Professional Role Orientation Scale as follows:

Urban schools	41.65
Suburban schools	39.47
Rural schools	41.56
Sub-rural schools	42.05

The finding that suburban schools are significantly more professional than sub-rural schools is consistent with the previous finding related to size and will presently be discussed in terms of what the Professional Role Orientation Scale is actually measuring.

Hypothesis 6 (The relationship between country of location and the measured variables.)

The statistical summary taken from Appendices J6, J7 and J8 with respect to English and Western Australian schools is as follows:

Variable	F score	p	0.05 level	Appendix Reference
Needs Satisfaction	1.17	.28	NO	J6
Professionalism	15.49	.00	YES	J7
Participation	.87	.35	NO	J8

The null hypothesis is again confirmed in part, namely

Personal Needs satisfaction and achieved degree of desired participation in decision making will not differ significantly for teachers in English and Western Australian comprehensive secondary schools.

The rejected part of the hypothesis leads to the following finding:

Professionalism does differ significantly for teachers in English and Western Australian comprehensive secondary schools.

Appendix J7 shows that mean scores for the Professional Role Orientation Scale are 39.35 for the Western Australian schools and 41.23 for the English schools in the sample.

The finding that the Western Australian teachers are more professional than their English counterparts will also be discussed in the light of what the scale is actually measuring.

Hypothesis 7 (The relationship between personal needs satisfaction and professionalism by school.)

School mean scores for the Satisfaction Index and the Professional Role Orientation Scale were correlated using

the Pearson correlation formula. Calculations and the data are shown in Appendix J9. The correlation (r_{xy} = .00) does not differ from zero and the null hypothesis is confirmed on statistical grounds, namely

There is no positive relationship between the level of response obtained by schools for personal needs satisfaction and the professionalism of staff.

Hypothesis 8 (The relationship between personal needs satisfaction and desired level of participation by school.)

School mean scores on the Satisfaction Index and the Participation Index by school were correlated using the Pearson formula. The calculations and data are shown in Appendix J10.

The correlation co-efficient (r_{xy} = .60) was significant at $p < .05$, showing that the null hypothesis is rejected on statistical grounds.

The alternative hypothesis is that

there is a positive relationship between the level of response obtained by schools for the personal needs satisfaction of teachers and the extent to which they achieve their desired level of participation in decision making.

Squaring the co-efficient of correlation (that is, r^2_{xy} = .358) shows that 36% of the variance occurs because of the relationship between these variables. This is a high proportion. The conclusion is reinforced by the high reliability of both instruments (α = .88 and .87 respectively).

This particular relationship leads also to conclusions to be discussed in the next chapter.

Hypothesis 9 (The relationship between professionalism and desired level of participation by school.)

School mean scores on the Professional Role Orientation Scale and the Participation Index were correlated using the Pearson formula. The calculations and data are shown in Appendix J1.

The correlation (r_{xy} = .02) is low, approximating to zero, and the null hypothesis must be confirmed on statistical grounds, namely

There is no positive relationship between the level of response obtained by schools for the professionalism of teachers and the extent to which they achieve their desired level of participation in decision making.

Hypothesis 10 (Differences between teachers with certain personal characteristics and personal needs satisfaction.)

The relevant statistics are given in Appendix J12 "Statistical Details of Needs Satisfaction Index Scores by Selected Teacher Characteristics".

The selected teacher characteristics are sex, marital status, age, experience, status, years in the school, subject area and qualifications.

Reference to the data shows that significant differences are found with respect to sex, age, experience, status and years in the school. Variations between scores obtained for marital status, teaching subject area and qualifications were not significant.

Each of the characteristics for which there are significant differences will be discussed in turn.

(a) Sex

The data is shown graphically in Figure 9, indicating that males obtain more personal needs satisfaction than females from their school situation. The analysis of variance test shows this to be significant at the .001 level.

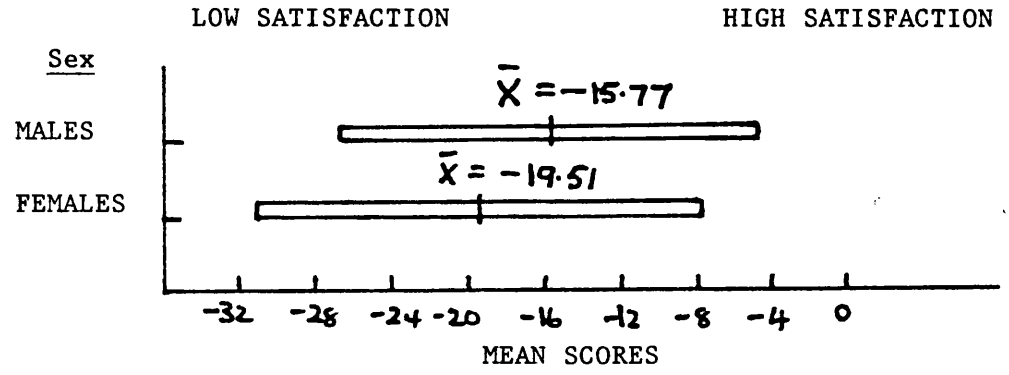

Figure 9: Needs Satisfaction Index Scores by Sex of Respondents

(b) Age

Figure 10 indicates the data in graphic form. The evidence is that, with the exception of the over 59 years age group (a small sample of seven respondents). there is steady increase in personal needs satisfaction as a teacher grows older. Analysis of variance tests show such results to be significant at the .05 level of confidence. The small sample of respondents over 59 years of age, which shows a decrease in personal needs satisfaction, presents a difficulty, since this is not consistent with the general trend. The graphical representation indicates the extent of the overlap in terms of standard deviation and sounds a cautionary note to such a conclusion. Despite this

slight aberration, it may be stated that the age of a teacher is a factor influencing personal needs satisfaction.

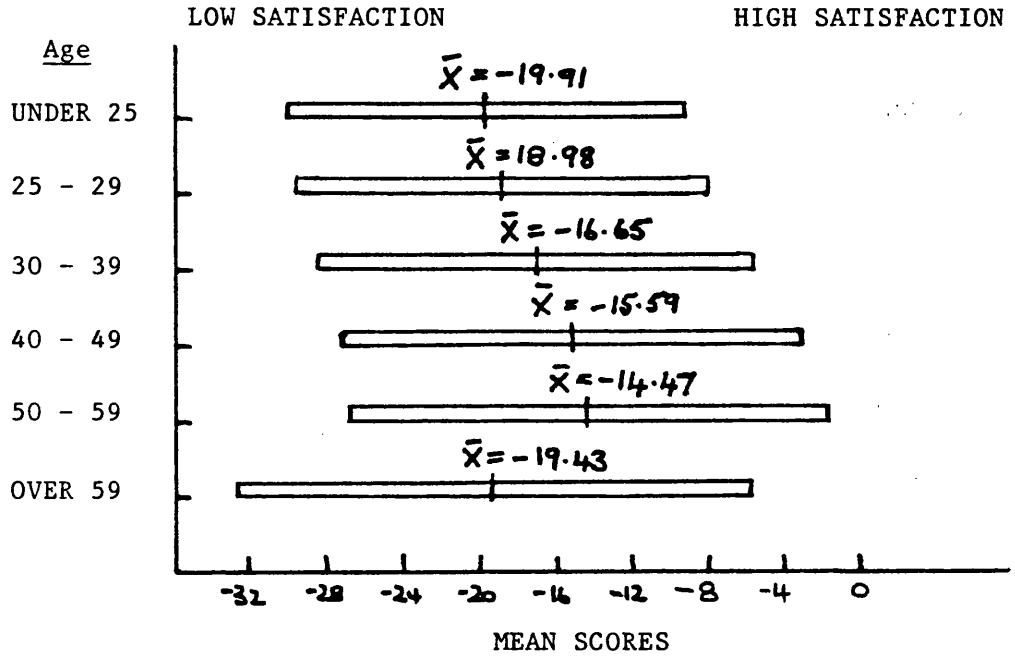

Figure 10: Needs Satisfaction Index Scores by Age of Respondents

(c) Experience

Figure 11 shows the detail extracted from Appendix J12. The figures show that after the first five years of teaching, there is consistently improving personal needs satisfaction, such a result being significant at the .05 level of confidence. The experience of a teacher is a factor contributing to personal needs satisfaction.

Experience is frequently closely linked to age, particularly in a professional occupation such as teaching. The two sets of results are consistent with this fact, namely, that levels of personal needs satisfaction increase with both

age and experience.

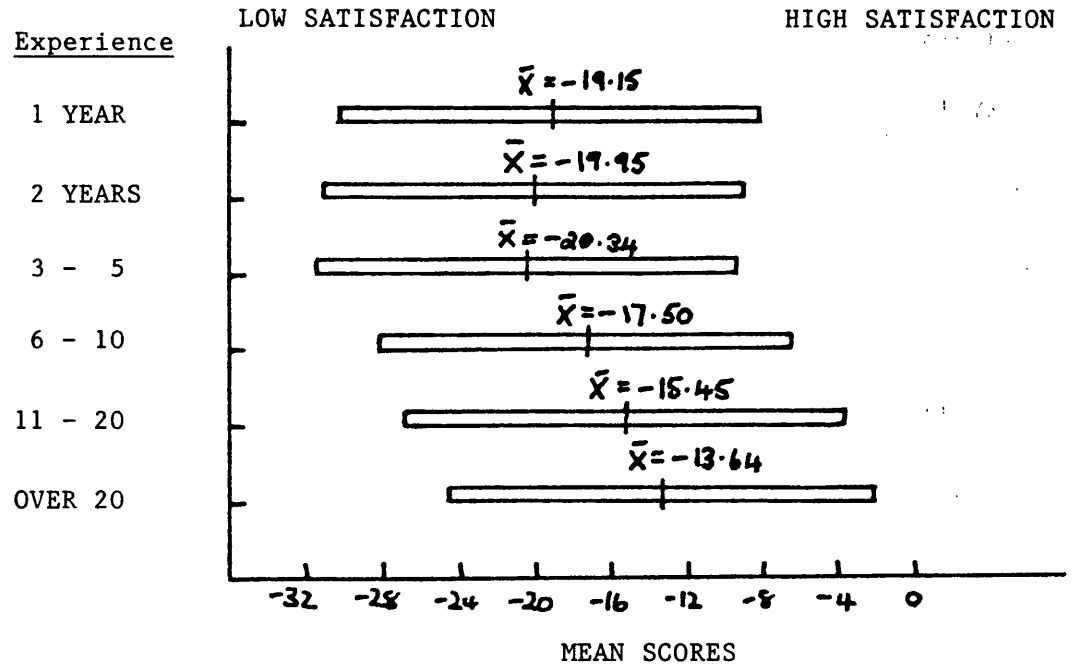

Figure 11: Needs Satisfaction Index Scores by Years of Teaching Experience by Respondents

(d) Status

The graph, Figure 12, indicates scores for the status groups of principal, deputy, middle management and class teacher.

The data indicates that teachers in higher status positions have greater personal needs satisfaction, particularly at the principal and deputy principal level. Middle level teachers, such as heads of department, also demonstrate considerably greater satisfaction than classroom level teachers. Analysis of Variance significance for this variable is at the high level of .001.

The status of a teacher is a factor contributing to personal needs satisfaction.

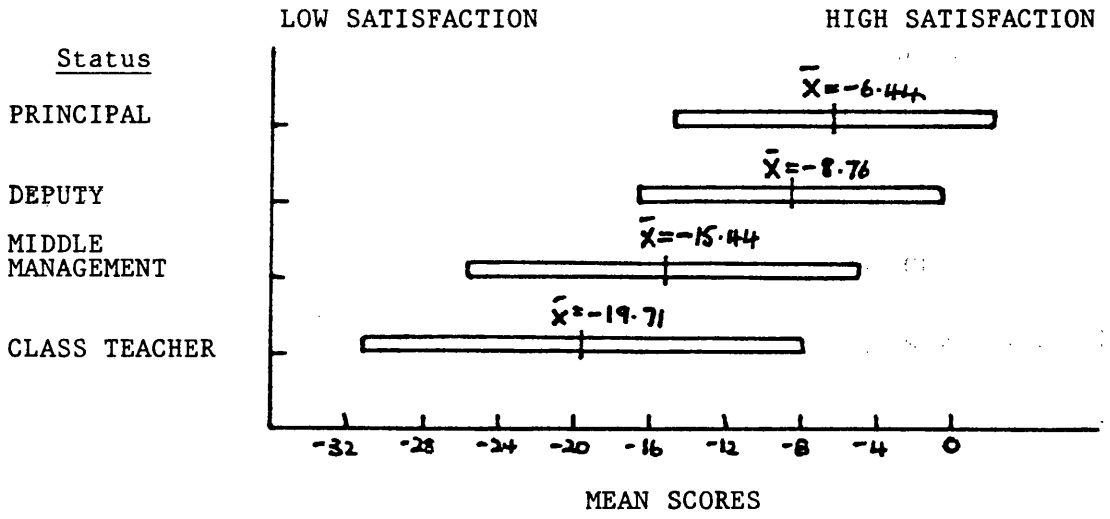

Figure 12: Needs Satisfaction Index Scores by Status of Respondents

(e) Years in the Same School

The applicable graph showing mean level of responses for this sub-group is Figure 13. The data demonstrates that teachers who have spent more time in a school tend to be more satisfied. Particularly noticeable about the scores is the difference between teachers in their first two years and those in the "middle" years of six to ten years in a school. Whilst this may bear some close relationship to the age and experience of a respondent, a number of quite experienced teachers in the Western Australian half of the sample had spent only one or two years in their current schools, due to the fairly steady rate of turnover promoted by the demands of the State system. Significance for these results is at the .05 level.

The length of time served by teachers in a school is a factor contributing to personal needs satisfaction.

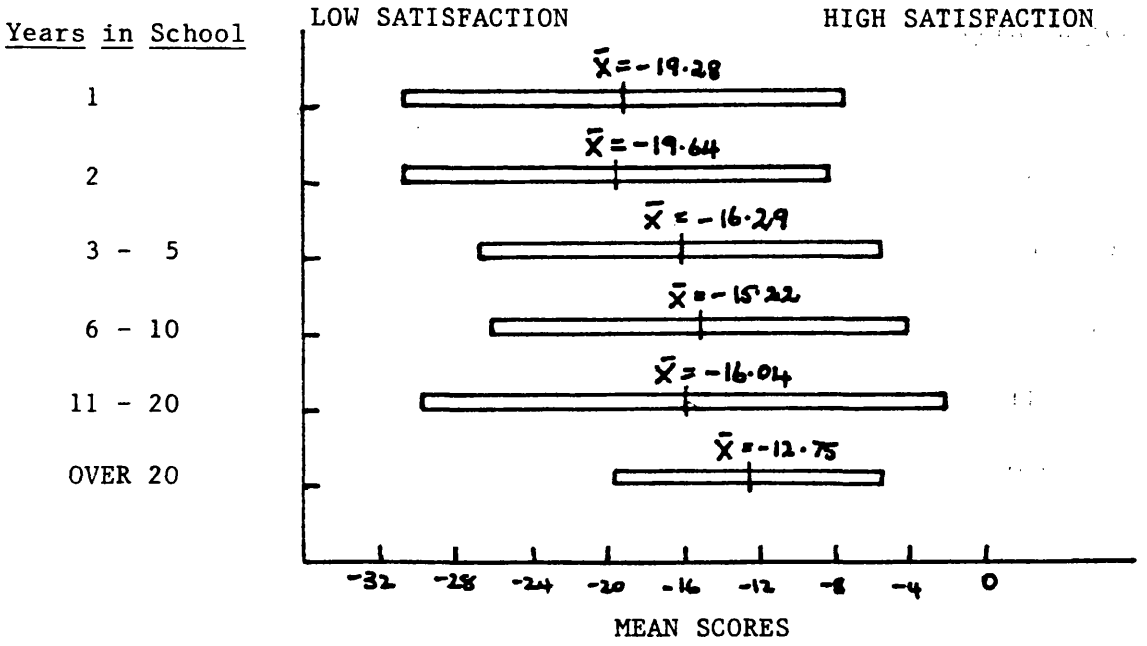

Figure 13: Needs Satisfaction Index Scores by the Number of Years in the Present School of Respondents

In view of the number of significant relationships, the null hypothesis is confirmed only for those characteristics for which variations are not significant, namely

The personal needs satisfaction of teachers will not differ according to their marital status, teaching subject and qualifications.

The counter proposition relating to significant characteristics is as follows:

The personal needs satisfaction of teachers will differ according to their sex, age, experience, status and length of time in the same school.

Had scores for perceived personal needs satisfaction

been used, the results would have been similar, thus confirming the significance of the same characteristics by a second method. The statistical evidence to support this claim is given in Appendix J13 "Statistical Details of Perceived Personal Needs Satisfaction Scores by Selected Teacher Characteristics".

Hypothesis 11 (The relationships between the personal characteristics of teachers and their professionalism.)

The relevant statistics are given in Appendix J14 "Statistical Details of Professional Role Orientation Scale Scores by Selected Teacher Characteristics". Reference to the table shows that significant differences were found with respect to only one characteristic, that of status. The null hypothesis is thus confirmed for all other characteristics as follows:

The professionalism of teachers will not differ according to their sex, marital status, age, experience, years in a school, teaching subject and qualifications.

The relevant data relating to the status characteristic is shown in graphical form in Figure 14. Analysis of variance results for this difference in scores is as follows:

F Score	p	0.05 level
4.40	.00	YES

The figures show a decline in professionalism as a teacher gains status. Such a finding again draws attention to the need to examine what the Professional Role Orientation Scale is actually measuring, a task given some prominence in the final

chapter. For the present it may be confirmed that

The professionalism of teachers differs according to their status.

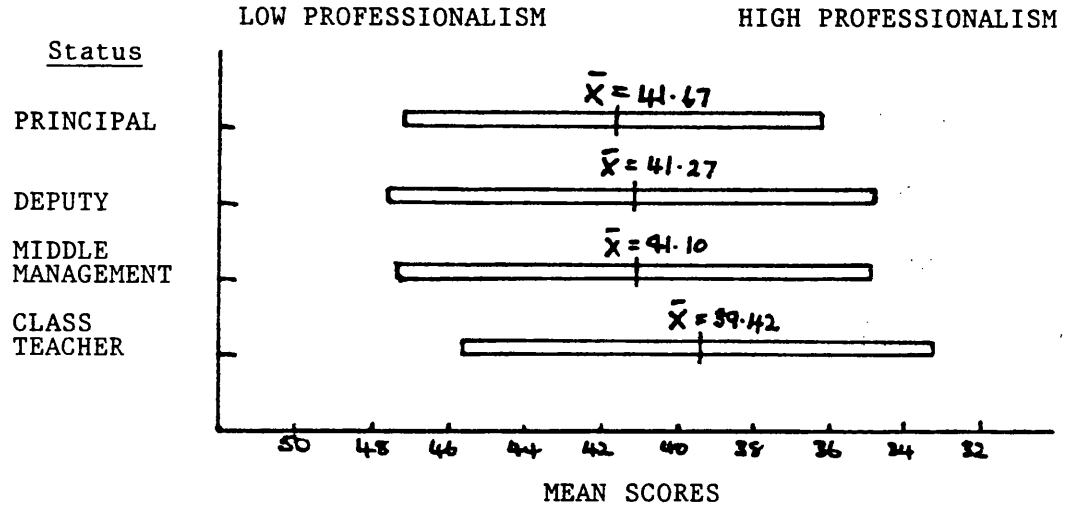

Figure 14: Professional Role Orientation Scale Scores by Status Group of Respondents

Hypothesis 12 (Differences between teachers with certain personal characteristics and their Participation Index scores.)

Relevant statistics are given in Appendix J15 "Statistical Details of Participation Index Scores by Selected Teacher Characteristics". This data shows that variations in scores for sex, age, experience, status, years in the school and teaching subject are all statistically significant. Variations between scores obtained for marital status and qualifications were not significant. Each of the significant sub-groups will be discussed in turn.

(a) Sex

Figure 15 represents graphically the differences between mean scores for male and female respondents.

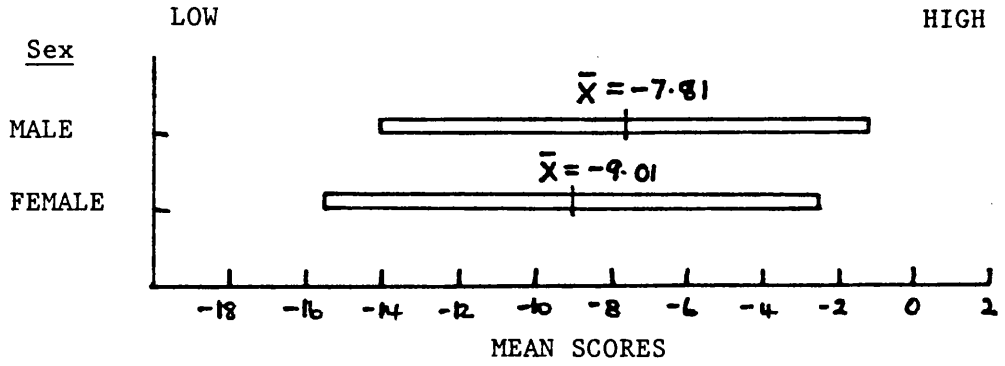

Figure 15: Participation Index Scores by Sex Groups of Respondents

Males approach more closely their desired level of participation than do females in their school situation. The analysis of variance results show this to be significant at the .05 level.

Sex is a factor influencing the degree of involvement of a teacher in a school.

(b) Age

Graphical representation of differences in response by age groups is shown in Figure 16. The older teachers become, the closer they approach their ideal level of participation. Such a conclusion is significant at the .05 level on the analysis of variance test.

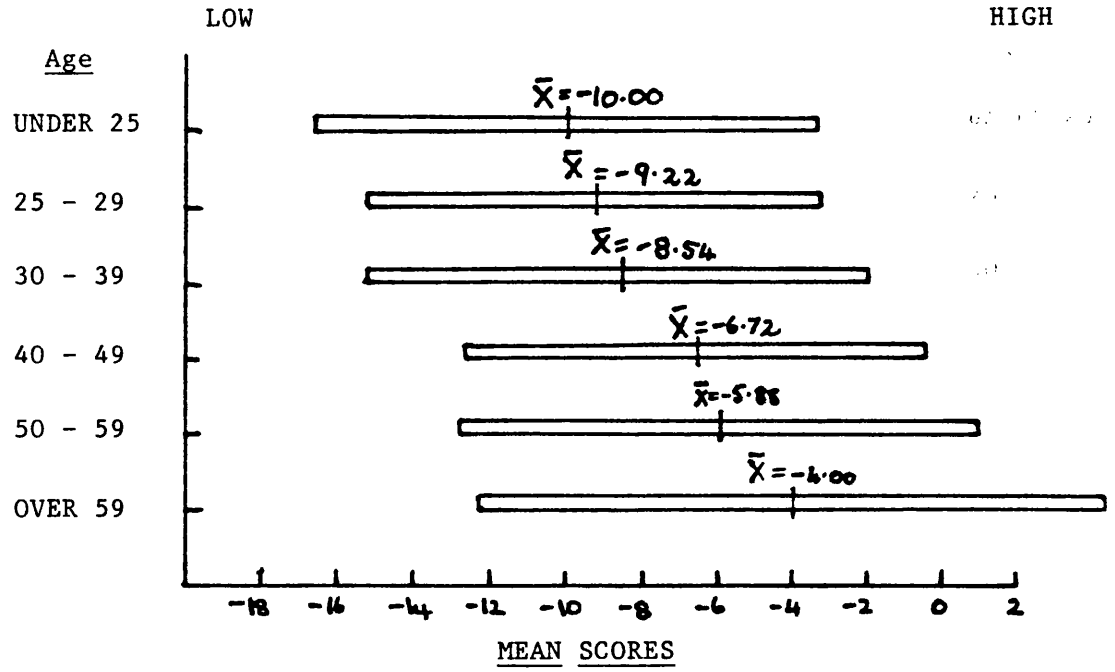

Figure 16: Participation Index Scores by Age Groups of Respondents

(c) **Experience**

Figure 17 represents graphically the mean scores of respondents by experience categories. This personal characteristic has already been noted to be closely related to age and status and possibly to number of years in a school. The results show that the more experience a teacher has, the closer his level of participation approaches the ideal, such a conclusion being significant at the .05 level.

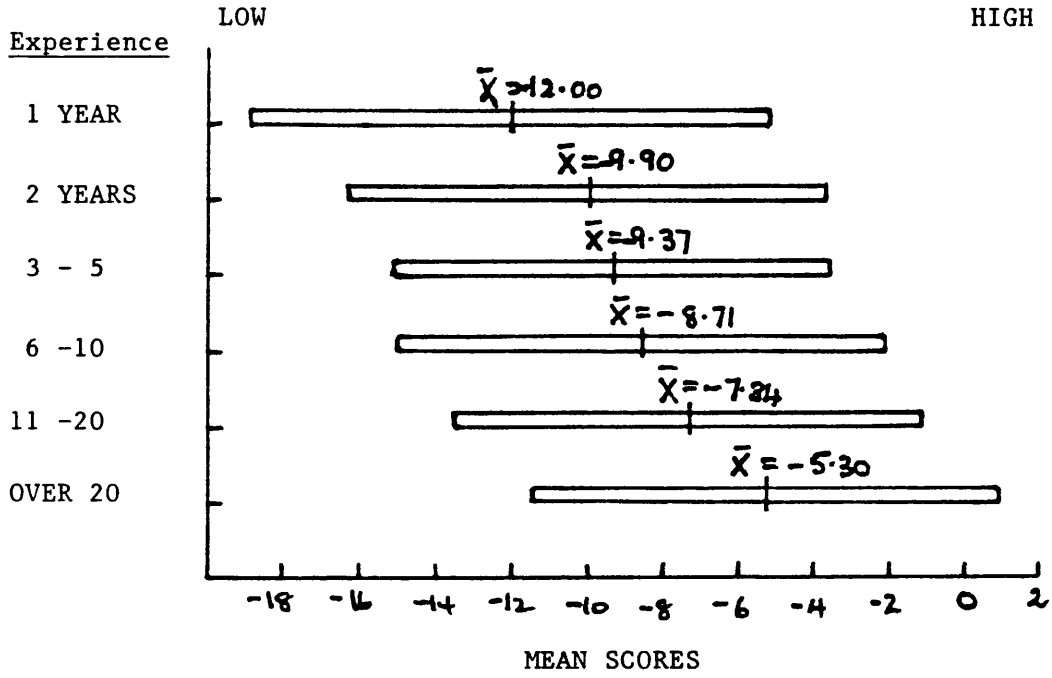

Figure 17: Participation Index Scores by Experience of Respondents

(d) Status

Figure 18 represents the scores of respondents by status groups. Again, the figures show conclusively and significantly that the higher the status a teacher holds, the closer his participation in decision making approaches his ideal. Such a conclusion is significant at the .05 level.

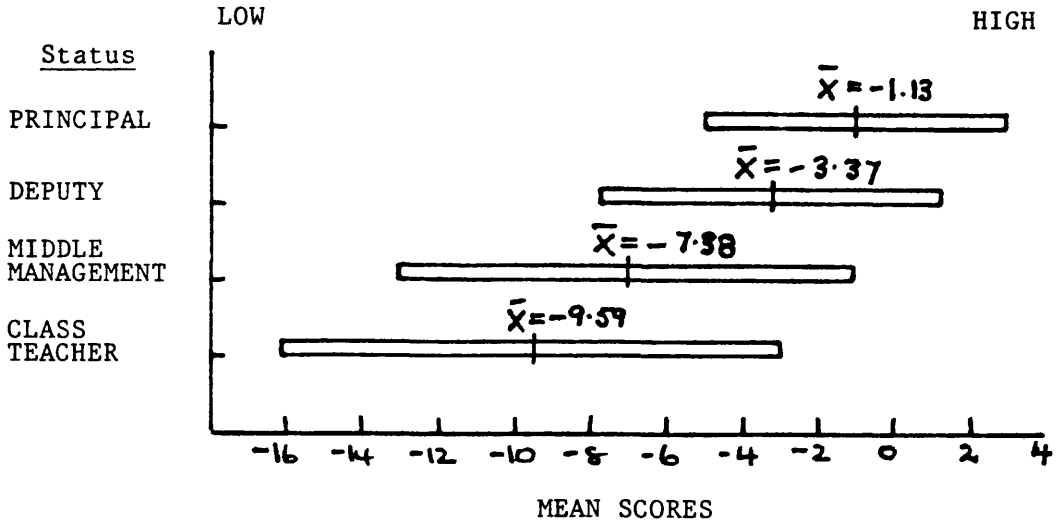

Figure 18: Participation Index Scores by Status of Respondents

(e) Years in a School

Figure 19 shows the relationship between mean scores for this respondent group.

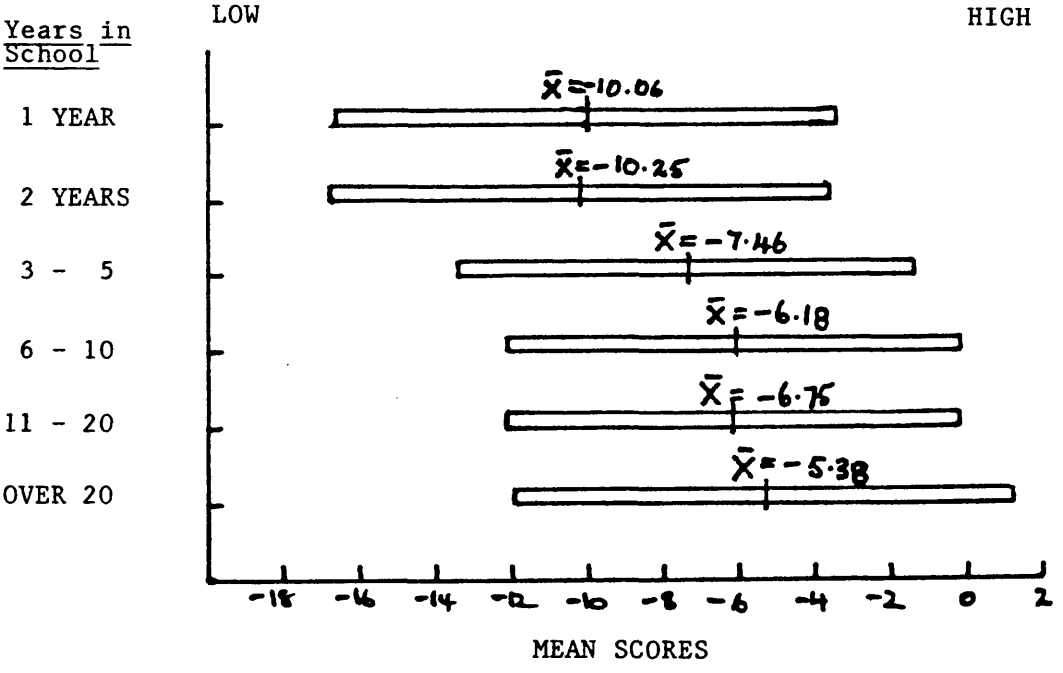

Figure 19: Participation Index Scores by Years in a School of Respondents

The longer a teacher spends in a school, the closer will be his participation in decision making to his ideal. Such a conclusion is significant at the .05 level.

(f) Teaching Subject Areas

Refer to Figure 20 for the graphical representation of the mean scores of subject teachers.

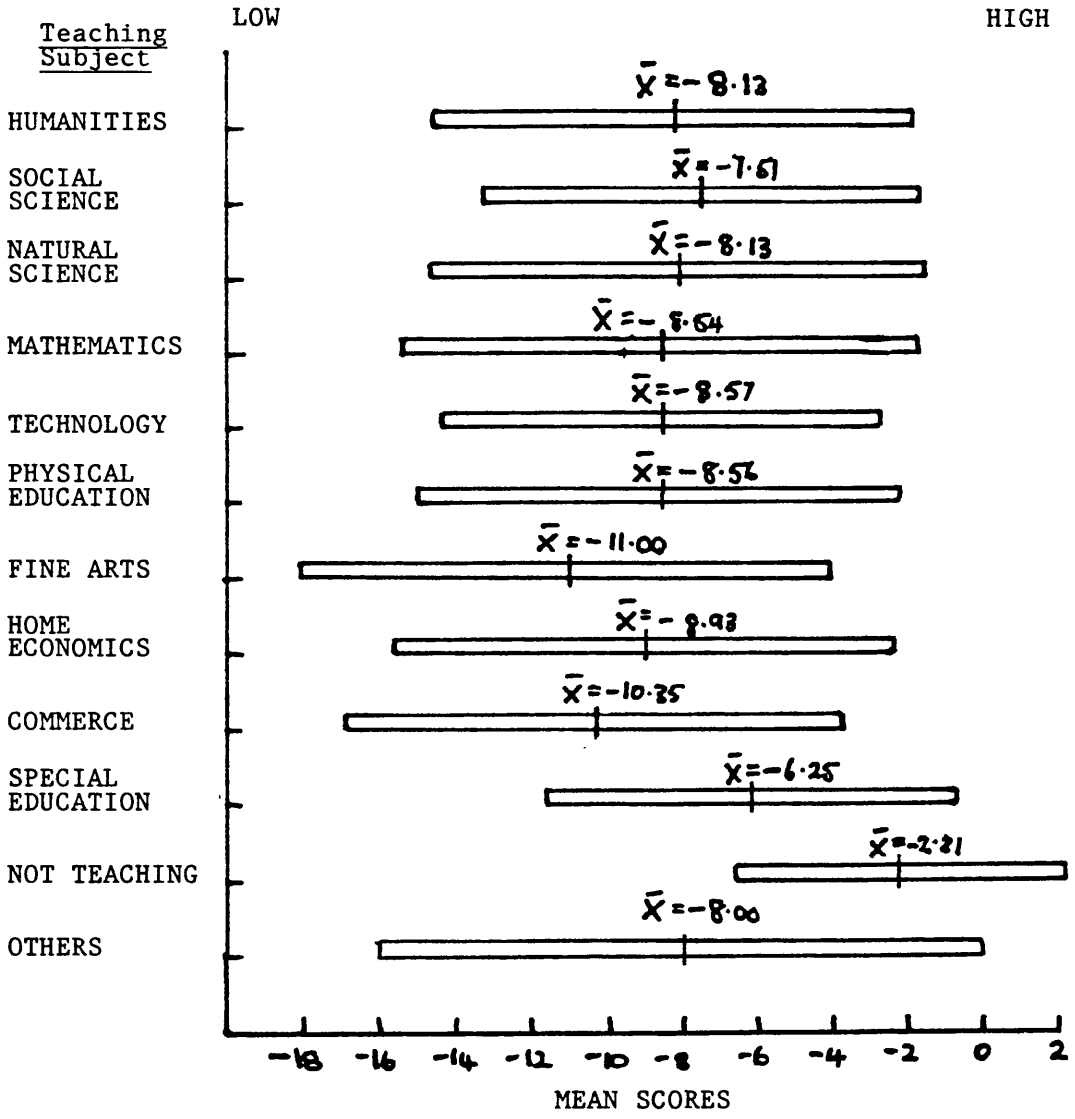

Figure 20: Participation Index Scores by Teaching Subject Area of Respondents

The statistical evidence shows that teachers of some subjects feel closer to or further from their desired level of participation than do others. Teachers not teaching and teachers of special education fall into the category of approaching their desired levels. Teachers of fine arts, teachers of commerce and of home economics are furthest from desired levels of participation. This difference in scores is significant to the .05 level of confidence. Subject area taught is a factor influencing degree of involvement in decision making.

Examination of the teachers involved shows some of these special cases to be closely allied to other characteristic groups. Teachers not teaching held, for the main part, status positions. Teachers of home economics and commerce were almost universally female. A conclusion that the subject area taught is significant for this variable must take into account the related factors.

Hypothesis 13 (The relationship between personal needs satisfaction and the professionalism of teachers.)

The computed Pearson correlation co-efficient between scores obtained on the Needs Satisfaction Index and the Professional Role Orientation Scale scores of respondents was as follows:

Correlation	.15
Number of Cases	622

$p < .05$ (SPSS Computed Results)

The null hypothesis assumes no relationship between the two. Here, despite the statistical significance, the correlation is so low ($r_{xy} = .15$) that it should be effectively discounted.

This may be shown statistically

$$\text{if} \quad r_{xy} = .15$$
$$\text{then} \quad r^2_{xy} = .02$$

(That is, only 2% of the variance is accounted for by this relationship.)

The fact that there is a low relationship means that the hypothesis must be rejected. In view of the low level of relationship, an alternative should not be assumed. A viable connection between these two variables has not been established.

Hypothesis 14 (The relationship between the Needs Satisfaction Index and the Participation Index of teachers.)

The Pearson correlation co-efficient between scores obtained from the Needs Satisfaction Index and the Participation Index of respondents was as follows:

Correlation	.50
Number of Cases	574
p	$< .05$ (SPSS Computed Results)

Here the null hypothesis must clearly be rejected since it may be shown statistically that the relationship accounts for 25% of the variance.

$$\text{If} \quad r_{xy} = .50$$
$$\text{then} \quad r^2_{xy} = .25$$

The rejection of the null hypothesis leads to a conclusion that

There is a positive relationship between the personal needs satisfaction of teachers and the extent to which they achieve their desired level of participation in decision making.

Teachers high on personal needs satisfaction tend to be involved at the desired level of participation in decision making and teachers low on personal needs satisfaction tend to be deprived of the desired level of participation in decision making, and vice versa.

This particular relationship is both statistically significant and high enough to warrant an examination of the causes for the relationship. Conclusions about this interrelationship will be made in the final chapter.

Hypothesis 15 (The relationship between professionalism and the Participation Index of teachers)

The Pearson correlation co-efficient between scores obtained from the Professional Role Orientation Scale and the Participation Index of respondents was as follows:

Correlation	.22
Number of Cases	601
$p < .05$	(SPSS Computed Results)

As with Hypothesis 13, the null hypothesis must be rejected because there is a significant relationship but the relationship is so low ($r_{xy} = .22$) as to be virtually meaningless. Such a correlation accounts for only 5% of the variance. Statistically, this may be shown as follows:

if $r_{xy} = .22$
then $r^2_{xy} = .05$

Although the hypothesis is rejected, an alternative will not assumed and the meaning of this very low level of relationship will not be pursued.

SIGNIFICANT DIFFERENCES NOT COVERED IN THE HYPOTHESES

The statistical data reveals a small number of facts not covered by the hypotheses. These are shown statistically in Appendix J17 "Miscellaneous Significant Scores of Test Results".

These particular findings must be treated with some caution. They were neither anticipated nor sought and have been arrived at by post factor analysis. Significant differences in mean scores reveal the following:

1. Western Australian teachers gain more perceived personal needs satisfaction within schools than do their English counterparts. Such a conclusion is significant at the .05 level, as shown in the summary below

F Score	p	0.05 level
6.10	.01	YES

2. The teachers of certain subject areas scored significantly high or low on perceived personal needs satisfaction. Those not teaching scored particularly high on this variable, whilst teachers of fine arts scored particularly low (Appendix J17: Part 2). This conclusion is significant at the .05 level, as shown below

F Score	p	0.05 level
1.99	.03	YES

3. Whilst the qualifications of teachers did not produce significantly different scores for the Needs Satisfaction Index or the Participation Index, they did show significant variations in scores for perceived satisfaction and perceived participation (Appendix J17: parts 3 and 4). Teachers with higher qualifications perceived themselves as more satisfied and as participating more than did teachers with low qualifications. The important statistics demonstrating significance are as follows:

	F Score	p	0.05 level
Perceived Satisfaction	2.92	.05	YES
Perceived Participation	13.14	.00	YES

For convenience, a summary of the findings is added below.

The discussion of the material and the pulling together of the threads of the two halves of the research will be the objective of the final chapter.

Summary of Findings

A: NOMOTHETIC DIMENSION

Considerable variation in ways in which school level policy is determined was evident from school to school. Schools did exercise autonomy in deciding how they would operate within prescribed parameters.

1. CURRICULUM: Subject teachers exercised greatest control even although the head may have used the power of veto. External prescriptions played a dominating role, with schools demonstrating considerable initiative and innovation.

Within prescribed limits, teachers at classroom level controlled the syllabus. School heads contributed little to syllabus determination.

2. ASSESSMENT: The schools exercised autonomy in the method and timing of reports but this was an area of some contention. Teachers or subject departments tended to make decisions about assessments and the head did not dominate, although he may have exercised the power of veto.

Modification to assessment procedures was difficult to achieve because of inter-departmental rivalries, traditions and community pressures.

3. STUDENT WELFARE: Formal welfare programmes were more firmly entrenched in the English schools than in their Western Australian counterparts. A further difference was in the status of persons responsible for welfare programmes, those in English schools generally holding status above that of subject senior teacher, those in Western Australia a lower status.

Conflict existed between the welfare and the teaching roles of teachers in both countries.

The variety of organizational patterns in vogue demonstrated the autonomy of most schools with respect to their welfare structure.

Teachers generally carried out welfare roles at the point of contact rather than by referrals.

Decisions about welfare were dominated by school principals

except where the procedures were regarded as traditional.

4. ORGANIZATIONAL STRUCTURE: The involvement of teachers in deciding about school organization varied considerably from school to school. Schools employed a variety of organizational patterns, indicating their autonomy in this area.

The timing, value and use of staff meetings for organizational purposes varied considerably from school to school. Large schools made less use of whole staff meetings, relied more heavily on committees than did smaller schools.

Every school in the sample had one senior committee which dominated decision making.

5. THE TIMETABLE: Decisions about the timetable and the allocation of time to subjects were regarded by all staff as highly critical areas. For this reason, change was difficult to accomplish and the subject of considerable staff negotiation. Perhaps mainly for this reason a number of schools maintained patterns regarded as traditional.

In some of the schools teachers were able to be heavily involved in timetable and teacher-to-class allocations. Where this was done by a timetabler, he or she was regarded as a most powerful figure on the scene,

Heads were prominent in negotiation and in approving the final shape of the timetable.

6. ETHOS: The schools appeared to give little conscious time to the development of a value system even although teachers acknowledged its importance.

The use of traditional practices was one common way of establishing school standards. The school assembly was a device

particularly employed in this respect.

Where the ethos was most clearly seen and understood, the role of the principal was shown to be critical. Schools tended not to declare their ethos in a written form.

7. RESOURCES: Whilst there was competition for scarce resources, there was a tendency either to regard the provision of buildings, money and equipment as somewhat outside the school's control or to accept some disbursement arrangement arrived at by common agreement. Teachers strove to be involved in decisions about resource allocation and their success varied from school to school.

In none of the sixteen schools of the sample was the distribution of resources a controversial issue.

8. STAFF DEVELOPMENT: The concept of professional growth of staff was supported in theory but not in practice in the schools under observation. Whereas schools made conscious efforts to provide good working conditions, they felt they had neither the staff resources not the time to manage effective formal in-service programmes. Two schools were exceptions to this generalisation.

Teachers generally attended external in-service courses whenever the opportunity presented itself and many were engaged in obtaining further qualifications, encouraged by their schools to do so.

In the main, schools attempted to provide some basic guidance for the beginning teacher.

9. PUBLIC RELATIONS: The sixteen comprehensive secondary schools made considerable effort to sell themselves to the public,

the principal taking the major role.

Parents contributed little directly to the school programme but their influence indirectly was considerable.

B: IDIOGRAPHIC DIMENSION

From the testing of null hypotheses, the following findings emerged:

1. Schools will differ with respect to the personal needs satisfaction of the teachers employed in them.

2. Schools will differ with respect to the professionalism of the teachers employed in them.

3. Schools will differ with respect to the extent to which teachers achieve their desired level of participation in decision making.

4. The size of a school does not significantly influence the achieved degree of desired participation in decision making of the teachers employed in it.

BUT

The size of a school does significantly influence the personal needs satisfaction and the professionalism of the teachers employed in it.

5. The environment of a school does not significantly influence the personal needs satisfaction or the achieved degree of desired participation in decision making of the teachers employed in it.

BUT

The environment of a school does significantly influence

the professionalism of the teachers employed in it.

6. Personal needs satisfaction and achieved degree of desired participation in decision making will not differ significantly for teachers in English and Western Australian comprehensive secondary schools.

BUT

Professionalism does differ significantly for teachers in English and Western Australian comprehensive secondary schools.

7. There is no positive relationship between the level of response obtained by schools for personal needs satisfaction and the professionalism of staff.

8. There is a positive relationship between the level of response obtained by schools for the personal needs satisfaction of teachers and the extent to which they achieve their desired level of participation in decision making.

9. There is no positive relationship between the level of response obtained by schools for the professionalism of teachers and the extent to which they achieve their desired level of participation in decision making.

10. The personal needs satisfaction of teachers will not differ according to their marital status, teaching subject and qualifications.

BUT

The personal needs satisfaction of teachers will differ according to their sex, age, experience, status and length of time in the same school.

11. The professionalism of teachers will not differ according to their sex, marital status, age, experience, years in a school,

teaching subject and qualifications.

BUT

The professionalism of teachers differs according to their status.

12. The extent to which teachers achieve their desired level of participation in decision making will not differ according to their marital status and qualifications.

BUT

The extent to which teachers achieve their desired level of participation in decision making will differ according to their sex, age, experience, status, years in a school and teaching subject.

[13. There is insufficient evidence either to confirm or reject a positive relationship between the personal needs satisfaction and the professionalism of teachers.]

14. There is a positive relationship between the personal needs satisfaction of teachers and the extent to which they achieve their desired level of participation in decision making.

[15. There is insufficient evidence either to confirm or reject a positive relationship between professionalism and the achieved level of participation in decision making of teachers.]

ADDENDUM

Perceived (that is, actual) personal needs satisfaction of teachers (distinguished from the Needs Satisfaction Index) differs according to country of origin, subject taught and qualifications.

Perceived (that is, actual) participation of teachers differs according to qualifications.

CHAPTER 6

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This investigation aimed to examine the operating procedures of the comprehensive secondary school and to consider the interaction of teachers with it. In this concluding chapter the strands of a complex analysis are drawn together by discussion of the methodologies employed, comparison with other research and consideration of the results. Conclusions embrace both the implications for further research and recommendations to those involved in the administration of schools.

THE RESEARCH METHODOLOGY

The broad spectrum of the topic presented problems related to the magnitude of the investigation. The decision to examine the perspective of the school as an organization on the one hand, and the teachers within the school on the other, led to the utilisation of two discrete and different techniques. As was pointed out in Chapter 4, neither method of investigation is without its critics. To some, any research other than the statistically demonstrable is not precise enough; to others it is most unreasonable to address behavioural patterns in quantitative terms.

Because of this difference of opinion about the value of alternative methodologies, one of the most pleasing features of this investigation has been its consistency. School

characteristics predicted by observation and interview have been confirmed by statistical analysis. The extent to which it has been possible to identify by observation schools where there are, by measurement, higher or lower levels of staff morale, reinforces the potential validity of both ethnographic and a priori approaches, at least with respect to this study.

More specific discussion and conclusions about the research techniques follow.

1. THE INTERVIEW AND THE PARTICIPANT-AS-OBSERVER ROLE

Times taken for each interview were not recorded. As very few lasted less than one hour and many more rather longer, the commitment in terms of time represents a significant investment on the part of the researcher. The notes of the interviews run to an average of five pages each, a total of over five hundred pages of detailed annotation in small handwriting. Importantly, it must be recognised that the summary statements have to stand up to the criticism that they are subjective interpretations on the part of the researcher.

Despite such obvious difficulties, the methodology is vindicated on two counts. Firstly, the consistency of the responses: there was general agreement as to how things were done in each particular school. Where inconsistencies in responses were evident, the most likely differences of opinion occurred between the perspective of the principal and that of the rest of the staff, a difference in perception observed in other research. Secondly, the size of the sample and the nature of its random selection give reason for confidence in the conclusions reached.

In addition to the interviews, the participative observation role, involving a week in each school, enabled the researcher to pursue with other members of staff, matters of particular interest. It was possible, in the circumstances, to form impressions about the climate of each school. Obviously, a detailed analysis of a particular school could, and probably should, take longer but in terms of a comparative analysis of a number of schools, the week spent in each was felt to serve the purpose well. It needs to be stated that the level of consistency between observation and interview responses was felt to be of a high order.

It is concluded that systematic analysis of a school by a participant as observer, utilising a semi-structured interview with a randomly selected number of teachers, has provided a good basis for assessing the functioning of a school.

In this case, the experience of the observer as a secondary school teacher and school administrator for more than twenty-five years may have assisted in providing a sound basis for observation.

2. RESEARCH INSTRUMENTS

Two of the research instruments, the Needs Satisfaction Index and the Participation Index, appeared to match the criteria required of them. Both had high overall validity, high internal consistency of items as measured by the C. ronbach's Alpha statistical technique. Furthermore, results appeared consistent with what seemed likely findings on the basis of the subjective evidence. In each case, the concept of an Index relating actual response

experience to ideal response level enabled the teachers to indicate the extent to which they were satisfied with the circumstances of their school. Such an approach eliminated results based on an assumption that every teacher's ideal was the same. Examination of individual responses showed, for example, that not every teacher wanted to participate very fully in the decision making procedures of the school. Similarly, it was seen that expectation of personal needs satisfaction varied widely between individuals.

On the other hand, the value of the Professional Role Orientation Scale is seriously questioned as an instrument measuring professionalism in English and Western Australian schools. Not only was the overall validity statistically low comparatively, but for none of the significant results was there available explanations for the differences observed. The evidence that schools do differ with respect to the professionalism of the teachers employed in them (Hypothesis 2) was marred by the fact that identified school characteristics for low or high levels of professionalism appeared to be inconsistent with other evidence. School size, for instance, was seen to be a factor, the smaller schools displaying significantly lower levels on the scale. It is an untenable proposition that school 5, subjectively one of the most successful of the schools in the sample, was staffed by largely unprofessional teachers. A similar conclusion that the professionalism of teachers differs according to status (Hypothesis 11) and that the least professional teachers in the school system are the principals is equally unlikely. These two findings throw doubt upon what the Corwin scale is measuring.

There were some warning signals about the use of the

Corwin scale. The writing of Corwin himself shows that he based his concept of professionalism upon conflict "not between the individual and the system but between parts of the system - between the professional and the bureaucratic parts of the organization" (Corwin, 1965: p.4). A selection of titles from Corwin's extensive works throws further emphasis on this bias, namely "Militant Professionalism"; "The Development of an Instrument for Examining Staff Conflicts in Public Schools"; "Teacher Militancy in the United States", to name a few. Some researches using the Professional Role Orientation Scale had found difficulty with it. Wermuth (1977) found scores closely related to "loyalty", suggesting that the conflict implied in Corwin's professionalism did not exist to the same extent when the teacher felt loyalty to the school or its principal. Hrynyk (1966) found some ambivalence with the Corwin scale in an Alberta situation. No one appeared to have used Corwin's instrument outside North America.

Reference to the items of the Professional Role Orientation Scale serves to emphasise the extent to which professionalism is viewed as conflict between the autonomy of the teacher and the administrative prohibitions of the school. Eight out of the sixteen items specifically invite comparison between bureaucratic and individual roles. For example:

> "It should be possible for a teacher to violate a rule if the best interests of the pupil will be served in so doing." (Item 1)
>
> "Teachers should try to put their standards into practice even if the rules of procedures of the school prohibit it." (Item 6)
>
> "Teachers should consistently practise their ideas of the best educational practices even if the

administration prefers other views." (Item 9)

(this author's emphasis: other similar items are those numbered 2, 3, 4, 14 and 15)

Such items provide particular conflict for administrators. This researcher heard a number of complaints about the instrument from senior teachers who found that the dichotomy suggested between administrative rules and teaching practice made assessment of some items difficult. In such cases the likely response was either "undecided" or "disagree". A number of such responses would lead to a score indicating low professionalism.

It is pertinent to observe that the two groups with significantly lower professionalism according to the scale were high status teachers, particularly principals, and teachers in smaller schools. It could be argued that higher status teachers, responsible for issuing administrative directives, found it hardest of all respondents to favour subordinates being vested with discretionary powers. Similarly, it could be argued that teachers in smaller schools, where the dichotomy between bureaucratic structures and teacher independence is less obvious, would also respond less enthusiastically to an "us" versus "them" type of situation.

The results show no correlation between professionalism, as measured, and the other variables. Such a result is hardly surprising in a situation in which the respondent was asked to back his own judgement in the face of administrative instructions. Perhaps the only possible conclusion is that professionalism, as measured, is a personal characteristic little related to the school in which the teacher finds himself.

In the light of these conclusions, attention is again

focussed on the distinction between "professionalism" and "professionality", as seen by Hoyle (1975a). The former term, as frequently used, was described as often emphasising rights rather than responsibilities. Hoyle's "professionality", meaning knowledge, skills and procedures of teachers, is almost certainly closer to what was intended for use in the current research than is the fight for professional autonomy implied in the scale.

Choice of this instrument was, in retrospect, almost certainly an error of judgement, making conclusions about professionalism, as envisaged, difficult.

It has to be concluded that Corwin's Professional Role Orientation Scale was not seen to be a decisive measuring tool in this research.

COMPARISON WITH OTHER RESEARCH

For the main part, conclusions reached are consistent with or complementary to findings or implications found in other studies, particularly those with English or Australian comprehensive school derivatives.

(1) THE SCHOOL AS AN ORGANIZATION

Three related sets of findings of the current study warrant specific comparison with other research. These refer to the complexity of the school, the contribution of the leader and the use of sub-school organization.

a) Complexity

The study showed the extent of collegiate decision

making and staff influence over decisions. Particularly obvious was the role of the senior committee. Another feature of the complex organizational pattern was the influence of and response to the external environment.

Among other research looking at whole of school organization were the studies of Monks (1968) and Bates (1971). These related investigations surveyed English and Welsh comprehensive school management and governance for the National Foundation for Educational Research and, as is the case with the present study but on a much wider scale, they showed the extensive differences between schools and the effects of these differences. The size of sample used by these two researchers emphasised not only complexity in organization but the infinite variety of schools. This present study found that its sixteen schools were all individual, all different. There is evidence to suggest that there are as many types of school as there are schools.

Another significant and important research into the mechanisms of school processes is the work of Richardson (1973). In her case study of one school, she stressed the importance of collaboration and participation of staff at all levels in the overall programme. Her study showed the conflicting roles of teachers, the "continuous staff conference" and the complex nature of the organization. A similar single school study by Wolcott (1973) demonstrated the extent to which the principal was required to be a mediator because of the degree to which staff expected to be involved in policy determination. The present study is entirely supportive of these conclusions, showing that they apply across the board to sixteen schools randomly selected.

A number of studies have concluded that organizational climate differs from school to school and that there is a relationship between morale and climate. This statement closely parallels, for example, the findings of Weiser (1975), who claimed that high morale was compatible with an open climate. Whilst the current study did not examine climate as such, differences in climate were not only apparent in observation from school to school but they were clearly related to staff perceptions of the school. To quote an example, the teachers in school 10 did not feel that they worked within the framework of an open climate, they did not claim that they made major contributions to policy. (These low opinions were substantiated by the scores they obtained in the Needs Satisfaction Index and the Participation Index.) The study made it possible to observe a relationship of some sort between climate and staff reaction to the school, a conclusion confirmed in the statistical evidence of the idiographic half of the research. The study would similarly endorse the findings of Coughlan (1970) that different types of organization lead to social structures within schools and that this in turn influences the value orientations of teachers. The picture is one of a complex infrastructure in which any one aspect of organization is influential upon and interrelated with staff perceptions. Adams (1969) found that where teachers were alientated from the organizational structure of their schools, it was related to their sense of involvement, and this also is the evidence of the present study. The fact that in the sixteen schools the teachers for the main part did feel involvement in at least some parts of the programme, led them generally to respond favourably

to that part of the school with which they were able to identify.

b) Leadership

Just as this has not been specifically a study of school climate, so it has not been a study of leadership. As with climate, however, the all-pervasive nature of leadership upon the school has made the implications impossible to ignore. Time and again, the inevitability of conclusions that the leadership qualities of the headmaster significantly influence the effectiveness of the school and its organizational structure has been made evident.

These conclusions are heavily endorsed by other research and, indeed, it is virtually impossible to find contradictory evidence. Flagg (1964) claimed that the principal tends to determine the climate of the school, whilst Gross and Herriott (1973) showed the effect of high Executive Professional Leadership on staff and student morale and performance. The present study confirms what Hughes (1970) claimed, namely, that teachers have high expectations that their headmasters will be able to sustain both professional and executive roles no matter how demanding these tasks may be. Similarly, this study has demonstrated the importance with which staff view the principal's leadership qualities, the conclusion of Grassie (1973).

There is also some evidence in the present study that principals vary their role to suit the size of the school. Cohen (1970) had claimed that head teachers used more structural roles in larger schools and that it was necessary that they demonstrate the capacity to show such variety. Present evidence is that principals of the larger schools, such as 3,4,7,11 and 13 adopted

highly structured procedures and that these were necessary. By contrast, the principals in schools 5 and 12 had a very much more intimate relationship with their more closely knit staffs.

It was the basic congruency of studies in leadership that steered the present investigation away from being yet another study into this much researched topic. As the research evidence unfolded, it became clear that no study into the school can ignore such an all-pervasive factor.

c) Sub-school Organization

The most original set of conclusions relating to the nomothetic half of this research are those involving the value of sub-school organization. Sub-schooling was seen to contribute to greater involvement of staff at all levels, leading as it did to a genuine devolution of authority. Sub-schooling was shown to be an effective means of turning large schools into smaller administrative units with correspondingly closer interrelationships between staff. Sub-schooling was shown to be one common feature of the schools with the highest levels of response to the Needs Satisfaction Index and the Participation Index. Of the sixteen schools, those with sub-school structures gave every appearance of being the most effective. There are important implications in this conclusion for school level and system level administrators, particularly in Western Australia where the centrally structured hierarchy of schools makes no provision for sub-school co-ordinators. Monolithic, bureaucratic schools, such as 3,6,11 and 13, suffered by comparison on almost every count of organizational effectiveness with their sub-schooled counterparts.

No other research examined dealt with sub-schooling as such but implications from other investigations agree to some extent with the conclusions of this study. Mackay (1964), who used a bureaucratic construct for organizational analysis, concluded that less hierarchical schools were more effective than the highly structured. Whilst it may be argued that sub-schooling implies an extended hierarchy, the administrative unit is effectively smaller and the counter claim, which could be argued from the evidence, is that the sub-school organizational pattern decreases the effect of hierarchy.

Carpenter's research (1971) concluded that teachers in "flat" organizations perceived higher job satisfaction, exercised greater professional autonomy and participated more in policy making than their counterparts in "medium" and "tall" organizations. Since the effect of sub-schooling is to reduce the visibility of the school hierarchy, the conclusions of this present research are consistent with those of Carpenter with respect to job satisfaction and participation but cannot be considered sustained in regard to professional autonomy, since this was not a variable in the current research. The findings regarding professionalism were inconclusive in this research and no positive relationship with sub-schooling was sustained.

The work of Paffenroth (1974) and Lusthaus (1974) imply value in sub-schooling. The former concluded that teachers involved in the decision process have greater job satisfaction, whilst Lusthaus found that teachers who perceived themselves in role conflict with the organizational structure of schools suffered in the performance of their tasks.

(2) THE TEACHER IN THE SCHOOL

Findings from the idiographic portion of the research can be widely cross-referenced with the work of others. Conclusions related to the hypothesis testing are broadly classified under three categories, those relating to the influence of the school on the teacher, those relating to the dependent variables investigated, and those relating to the inter-dependence of the variables.

a) The Influence of the School

Hypotheses 1 - 9 relate to differences between schools. A small selection of the extensive research demonstrates a high degree of acceptance of the conclusion that staff reaction does differ by school, as found in the current study.

Blumberg and Amidon (1963) demonstrated the differences in reaction of teachers to the variations in the methods of conducting staff meetings. In their case, where teachers saw their school meetings as staff centred, there were more favourable reactions than from teachers in schools where meetings were seen as principal centred. In this present research, two complementary conclusions are supportive of these hypotheses. From the sixteen schools, it was seen that staff meetings tended to be more accepted, more popular in the smaller schools, and also that they tended to be more principal dominated in the larger institutions.

Robinson (1966) concluded that professional role orientation varied according to the bureaucratic construct of the school, that there were highly significant differences between the respondents from different schools. The current research

also found significantly differing responses to the professionalism scale from teachers in different schools but was unable to specify what particular features of schools (other than environmental influences) may have caused these differences. The evidence of the sixteen schools does not in any way verify Robinson's findings.

Punch (1969,1970) attempted to account for inter school differences in terms of leader behaviour. His findings were that leader behaviour was the biggest determinant of the level of bureaucratisation and that teachers responded with varying degrees of favourableness to the state of the bureaucracy in the particular school. The present investigation found implications relating to bureaucracy in terms of the level of sub-schooling and favourable results from effective leadership. There is a fairly close similarity between these findings and those of Punch.

Similarly, the findings of Calvery (1975), that there are significant relationships between the degree of bureaucratic structure and the organizational climate of schools, are generally supported by the evidence of this research, which also clearly showed in its statistical evidence that the perceptions of staff were significantly different for all variables tested from school to school.

b) The Dependent Variables

Hypotheses 10 - 12 relate specifically to the dependent variables. The evidence is that teacher responses tend to differ according to needs satisfaction and participation but conclusions about professionalism do not sustain this view.

Needs Satisfaction: This study identified factors influencing the personal needs satisfaction of teachers. Apart from inter school differences, satisfaction was seen as being affected by sex, age, experience, status and length of time in a school. Most other research utilising this variable examined such personal characteristics and there is some variation of factors identified as influencing personal needs satisfaction of teachers.

Of the research examining this variable specifically, comparisons with two seem worthwhile.

Sergiovanni (1966) attempted to identify those factors which lead to satisfaction and dissatisfaction among teachers. Some factors leading to staff satisfaction were achievement, recognition and responsibility. Those leading to dissatisfaction included the supervision, policy and routines imposed by administrators, as well as status and personal life problems. The pertinent summation was that the areas of greatest satisfaction were those related to the work and involvement in it, whilst those factors leading to the greatest dissatisfaction were those relating to the conditions of work. The point must be made that, whilst this current research does not directly identify these factors, it does, by implication in the observations and interviews, endorse the conclusion that achievement, recognition and responsibility lead to satisfaction amongst teachers.

Grassie and Carss (1973) examined satisfaction of teachers and concluded that those who rated professional values highly were more likely to find satisfaction with work and colleagues, were more likely to be happy with thrustful leadership and the opportunity to participate in decisions about policies than

were those who had little regard for these values. Their research indicated the difficulty for the administrator in catering for all staff by suggesting that action taken to increase the satisfaction of one group may decrease the satisfaction of others. Again, whilst this current research does not directly demonstrate a relationship between professionalism and satisfaction, it does, by implication, demonstrate the difficulty inherent in attempting to provide a satisfying work environment for all types of teachers within the organization.

The biggest contribution of the current research with respect to this variable is the identification of teachers within the context of the comprehensive secondary school who appear to feel deprived in terms of their needs satisfaction.

Professionalism: The current research rejected any specific findings with respect to the professionalism variable. The evidence tended to suggest that personal and external influences were more important contributors to individual professionalism than the organizational inputs. On the other hand, the fact that levels of staff response differed significantly by school shows the need for further investigation of this topic.

At least three other researchers found external factors to be important determinants of levels of professionalism: Colombotus (1961), Paffenroth (1974) and Sobong (1975). On the other hand, Lusthaus (1976) found professionalism to be associated with personal interrelationships within the school. In the present study, it appeared that some factors must be contributing to the significantly higher or lower levels of responses in particular schools but nothing in the evidence indicated what these were.

Participation: Research into levels of participation is generally consistent. This study showed that the extent to which teachers achieve their desired level of participation is affected both by the school in which they operate and by their sex, age, experience, status, years in a school and subject taught. The participant-observation segment enabled an examination of decision making and the involvement of teachers, and demonstrated how important this particular variable is. A number of other researches have attempted a similar task with varying results.

Sharma (1963) examined how decisions were made and how teachers thought they ought to be made. As in the present study, he was able to show that teachers desire to participate, they are happier about decisions they have helped to make and they are less indifferent towards the school when they are involved.

Godfrey (1968) and Wendlandt (1970) reached similar conclusions, both finding that teachers, for the main part, wanted to be involved more than they were. They also agreed that staff participated in some areas but that principals dominated school level decisions.

Davidson (1975) concluded that secondary school teachers did not see themselves as excluded from participation in policy making. Conway (1973) also saw teachers as participating and found that higher levels of effectiveness occurred in those schools in which higher levels of participation were evident.

The conclusions of those above are consistent with the present investigation.

The one examined piece of research with contrary findings is that of Bridges (1964), whose conclusions were that participation

did not necessarily engender more favourable attitudes in staff. Bridges found that the size of the school and the experience of the principal were more important than the degree of participation. The current research would not argue with the import of school size or leadership experience but it is not in a position to state whether or not participation is of less import. The intuitive interpretation of the present evidence is that the degree of participation is a highly important factor in influencing organizational effectiveness.

c) Relationships between the Dependent Variables

Correlation of the dependent variables is tested specifically in Hypotheses 13 - 15 and by implication in numbers 7 - 9, where differences between schools for these relationships are examined. Of the three possible combinations, two involve professionalism, the variable of least reliability in this study. All four hypotheses relating professionalism to the other dependent variables were confirmed in the null form, meaning that there is no significant correlation with them.

Relationships involving professionalism with the other variables of this investigation have not elsewhere been heavily researched. Among those who attempted this was Paffenroth (1974), who examined the relationship between professionalism and involvement. Results, as with the current study, tended to be ambivalent. It was found, for example, that the degree to which teachers perceived themselves involved was not related to their expressed values nor their attitude to education.

On the other hand, the relationship between needs satisfaction and participation was seen to be relatively high

and significant, both independently and by school. The results that have emerged from this study tend to reinforce the conclusions of a large volume of other research, including that of Alutto and Belasco (1972), Smallridge (1972), Best (1973), Paffenroth (1974), Prieto (1975), Feldman (1976) and Henderson (1976).

The scope and variety of research evidence related to this part of the current investigation is indicative of the many facets attempted in this study and also of the number of times this particularly important relationship has been examined. The findings of related research show general consistency between the present findings and previous work in the field.

DISCUSSION OF THE FINDINGS

The results of the investigation will be discussed in terms of the research model, firstly for each dimension and then with respect to the interaction between them.

A: THE NOMOTHETIC DIMENSION: SCHOOL FUNCTIONING

1. THE POLICY PROCESS

The interviews and observations in sixteen comprehensive secondary schools in action were designed in such a way that the aspects of structure, objectives and the policy process were interwoven. If the stages of operation are discussed, all these component parts will be included. Five stages of operation were earlier identified: goal definition, decision making, planning, operation and review (see Figure 4, p.109). Each will be discussed

in turn.

(a) The Goal Definition Stage

External stimuli clearly influence the goals of schools. Interviewed teachers were conscious of the effect of outside pressures on curriculum both in terms of subjects offered and the syllabus content. The shape of the staff hierarchy and school building designs were seen as imposed conditions helping to structure the organizational format. Ethos is not so much a school determined quality as a reflection of community values. Major resources in schools are very much dependent upon Education Authorities or political decisions. Staff development leans considerably upon external courses. Public relations is, by its very nature, a two-way process involving the school in reaction to public response.

Nevertheless, teachers in the sample schools saw themselves as making the major input at the point of goal definition.

The traditional view that the school head autonomously defines the goals was not substantiated in the interviews, the actual practices being complex and varied. Subject teachers appeared more influential in syllabus matters than the principal, whilst the principal appeared to dominate in setting the goals for student welfare programmes and ethos definition. Interviews consistently demonstrated that, in the comprehensive secondary school, decisions are frequently the result of committee action rather than individual initiative. There is more of a shared role in determining assessment procedures and resource allocation than a prescribed role. The secondary comprehensive school is caught up in a web of its own complexity which makes a devolution

of power inevitable.

Consistently throughout the sixteen schools, goal definition was influenced by particular persons, groups or sub-groups according to the level of their involvement in the particular policy area. Matters having special relevance to classroom teachers, such as syllabus determination and resource allocation, were seen as heavily influenced by them.

Areas seen as having less direct application to the teacher, such as public relations, some aspects of student welfare and ethos, were more noticeably under the direction of administrators.

Perhaps this could be regarded as a pragmatic solution to the problem of the complex interaction of conflicting priorities within the school. It is more likely the result of both the expertise of the staff with respect to particular issues and their organizational proximity to the operation of the area concerned.

The evidence from sixteen schools was clear and convincing. Staff do feel that they contribute in some ways to influencing, and in some cases determining, the definition of goals. Even in schools such as number 10, where the head was regarded as autocratic, staff were able to delineate aspects of school goal determination over which they had influence. On the other hand, staff did not necessarily feel that they had sufficient influence over all key areas. Further discussion on this point emerges in the next stage.

(b) The Decision Making Stage

The machinery of decision making is equally complex

and mutable. Differences occurred within schools from policy area to policy area as well as from school to school. One fact of clear consensus from the sample schools was that the headmaster could and would exercise the power of veto if he felt bound to do so. Teachers accepted his right to wield such power, acknowledging as they did so that he must also accept ultimate responsibility for the actions of the school. In not one of the sixteen schools was there evidence of an abuse of this power or an attempt by a head to exercise a consistent monopoly. Rather, the pattern was for widespread consultation, acceptance of the recommendations of committees and the utilisation of staff expertise. The senior committee evident in every school appeared more likely to reach a point of decision than the headmaster acting unilaterally. Heads expressed the view that, if they were unable by putting the case to convince at least the senior staff group about the viability of a proposal, then its value must be in doubt. More importantly, the practicability of carrying it out would also be suspect.

Many potential decisions appeared to be avoided by either the operation of traditional practices or by default. An example of decision by tradition occurs in the case of assessment procedures, where conflicting viewpoints of staff lead to preservation of the status quo. The decision not to change is a pragmatic one, a compromise between apparently irreconcilable proposals dominated by the differing requirements of various subject departments. As an example of a default solution, decisions about school ethos may be cited. Schools appeared rarely to make recorded decisions about ethos and the will of the headmaster

nominally prevailed. Staff discussion about discipline procedures and standards were frequent but decisions were about procedures rather than values and the resultant change in practices had a tendency to be short-lived.

The evidence was that teachers valued the contribution they could make to decision making and were vocal if they felt they were deprived in this respect. The differences between schools may be exemplified by reference to school 10, where the teachers felt they had little say, and school 16, where the staff felt widely involved.

Some decisions were seen as more critical than others because of their sphere of influence. Whereas, for example, only teachers of a subject were very concerned about the content of a syllabus, a ubiquitous area such as the timetable was a potential area of conflict. It was in such dominating spheres that staff felt they were not always involved. No matter what the input of staff into decisions about the timetable, power ultimately resided in the person or persons who assembled it. Some decisions were almost inevitably made arbitrarily in order to make the final pieces of the jigsaw fit together. Schools 1 and 10 have been quoted as being regarded by staff as autocratically run. In these schools, staff did not say that they did not influence decisions but what they implied was that they had insufficient influence over what they saw as the most critical decisions.

The way decisions are made and the extent to which teachers are involved in the most influential policy areas have been shown to be of great importance in determining the way

teachers feel about how the school runs.

(c) The Planning Stage

In planning for the operation of its tasks, the comprehensive secondary school excels. Evidence of the meticulous and thorough nature of the exercise was seen in the preparation of timetables, the outlining of subject syllabuses and programmes, and the establishment of welfare schemes.

Planning tended to be allocated to persons strategically placed to carry out the task. Timetabling, for example, was frequently (but not universally) in the hands of an administrative deputy; welfare programmes were jointly planned by suitably appointed committees; public relations was masterminded by the headmaster; syllabus definition was the role of the subject senior teacher; and so on.

Schools take the planning operation seriously because it is recognised that effective operation depends upon proper organizational arrangements. The need to plan in detail is accepted by teachers and the strategies required to run school programmes are well documented. Planning procedures involve teachers at all levels, since this area is seen to be a routine necessity for the effective maintenance of the comprehensive secondary school.

Importantly, the interviews showed that staff at all levels participated in planning and regarded it as routine. Once the decision about what was to take place had been made, it was up to the teacher (or teachers) responsible to make the proper provision for effective operation. This is an example of the devolution of responsibility upon which the school depends

for the execution of its functions. Neither was there any apparent disagreement on this point: it was the decision rather than the plans which was likely to be at the centre of any controversy.

Pragmatically, schools have recognised that tasks cannot be carried out well unless adequate planning occurs.

(d) The Operation Stage

The actual running of the school organization occupies most of the human resources of the school for most of the time. Other stages of the policy process are carried out for the purpose of operating educational programmes.

The evidence of the sixteen schools suggests that the lower a teacher in the hierarchy, the greater the time spent in strictly operational roles. Conversely, the more senior a teacher becomes, the greater the proportion of time given over to the other stages of the policy process.

Schools operated in a variety of ways. This investigation looked at the modus operandi of each, not so much with a view to assessing whether or not it was efficient but rather from the point of view of how things were done. From this perspective, differences between schools were obvious. In school 10, for example, corporal punishment was employed to enforce behavioural standards; in school 16 it was not. In school 5, classes were cross-set in groups of three with students of mixed ability, whereas in school 7, discretely streamed classes operated. School 2 made a major feature of its welfare programme, a feature almost absent from school 15; and so on.

The conclusion is that schools exercise considerable autonomy with respect to the way they function. It can also

be deduced that the method of operation reflects differing circumstances as well as the interpretation of their role that a particular staff adopts.

(f) The Review Stage

Interview responses to questions involving review and leading to possible modifications were consistent from all schools.

Interviewed teachers saw review as ongoing and inevitable, the most important ingredient being the large number of people involved in the organization. Teachers, students, parents and the community were seen as being in a position to criticise and doing so. Even at an informal level, constant discussion made certain that school performance would be examined. As far as teachers were concerned, it was impossible to be unaware of the critical scrutiny to which the school was subject. At a formal level, inspections by Education Authority officials were seen as a critical form of school review.

Review is not, however, merely an informal arrangement dependent upon public and private criticism or a mechanistic evaluation by school inspectors. Formal self examination of school functioning is provided through the agency of the many committees and staff meetings, the decision making and the planning which occur. The time given to review processes varies from school to school and within schools from one subject department to another. The staff involved in evaluation are similarly varied. Importantly, in not one of the sixteen schools was a teacher interviewed who was unable to recall immediately examples of formal review occurring within his school. Evaluation of success

or failure of programmes is an integral part of school management.

In order to make a particularly telling point about the review process, it would be helpful to make a subjective judgement. Whilst it was not the purpose of the investigation to attempt to evaluate the quality of the schools, given the background of the researcher, it was difficult not to do so. It seemed that two of the schools, numbers 5 and 16, were quite outstanding in terms of the service they supplied to their clients. In each of these quite different schools, one small, rural, English, and one large, suburban, Western Australian, staff were seen as heavily involved in decisions about the school; the heads providing what was obviously strong, positive leadership; provision being made for students to contribute to the policies of the school. In each of these schools, the processes of school evaluation were clearly ongoing and vigorous. Comparatively speaking, they each devoted considerable effort to staff meetings, senior staff meetings, student meetings, committee groups and so on, and to assessing the success of school programmes. The point made is that their apparent success was due in no small part to their conscious effort to carry out the process of review.

Change may occur as the result of events during any part of the policy process but formal review is most likely to lead to policy modification. Interviews made it clear how conservative schools tend to be, how change in major policy is rarely achieved without considerable negotiation, how the most likely solution to any bitterly fought conflict is the preservation of the status quo. On the evidence, the most common source of conflict is rivalry between subject departments which

tend to see programmes in terms of their own specific requirements.

Forces inside and outside schools ensure that the review process will occur. It seems that schools owe it to themselves to monitor the quality and frequency of their own self evaluation.

2. DIFFERENCES BETWEEN SCHOOLS IN POLICY MAKING

The earlier assumption that schools differed in policy making procedures is justified by the evidence of the interviews. Each of the sixteen schools displayed peculiar characteristics and no one school appeared to be a carbon copy of any other.

One inevitable conclusion is that the school principal is a critical factor influencing the procedures adopted in any school. All interviewed teachers acknowledged the role of the head in this respect. Some of the heads exercised particularly strong and clear leadership, such as those of schools 2,5,12 and 16. In school 4, the head had been in charge for more than twenty years and his word was law. In other schools, such as 1,10 and 11, the head was seen as fairly autocratic and, again, his or her influence was clearcut. Even in schools where the head adopted a lower profile, such as in schools 7,8,9 and 15, his strategic place in the organization enabled him to see that he had his way in matters he regarded as important. In some schools, such as 6 and 13, the head acted noticeably as an arbitrator between competing factions, again a position of strategic importance. Even in a school such as number 14, where it was hard to escape the conclusion that staff regarded the principal as a "bungler", they did not doubt his influence over policies and practices. It is concluded that the status position of the head, combined

with the lynchpin position he holds in the organization, makes it inevitable that he will have strong influence over policy procedures even when he is matched by a strong and well established staff and long standing tradition.

The environmental factors of the school also contribute palpably to policy procedures. In small schools, such as 1 and 5, staff had a close affinity with each other and teamwork throughout the school was in evidence. Isolated schools, such as 5, 6 and 12, had a sense of belonging and responded noticeably to community pressures. Schools tended to tailor their practices to the socio-economic areas they served. School 2, for example, in a depressed working class area of Bristol, emphasised co-operative decision making, whilst school 15, in a professional white collar area of Perth abounding in academics, promoted competitive achievement between subject departments.

A third factor contributing to differences in policy making procedures was seen to be related to the size and status positions of the members of the senior staff committee. As this provides one very noticeable difference between English and Western Australian schools, it is dealt with in a separate section below.

There are obviously other factors peculiar to a school which determine that its procedures will be its own. In school 9, conflict between the head and a deputy led to a special set of problems. In several cases the difficulties posed by a malcontent teacher or teachers were cited. A very strong local lobby, such as the parent group of school 15, may have a strong influence over school procedures.

The interviews demonstrated beyond doubt that although common general patterns of organization exist, local personalities and circumstances ensure that each school finds its own solutions to its own problems.

3. DIFFERENCES BETWEEN ENGLISH AND WESTERN AUSTRALIAN SECONDARY SCHOOLS

English and Western Australian comprehensive secondary schools are remarkably similar in their organizational patterns, in their corporate approach to management, in their adaptation to local needs. Of the sample, inter school differences were more evident than variations based on country of placement. School 5 in England, for example, would have been in many ways closer to school 12 in Western Australia than to English school 2.

In two of the policy areas, the English and the Western Australian schools demonstrated a different emphasis.

1) Student welfare programmes were more highly developed, more sophisticated and more systematically pursued in the English schools. Two reasons for this are advanced. The first is the historical fact that English schools became aware of the need earlier, and made provision for the establishment of house or year systems in response to what were, in some parts of Britain at least, more pressing welfare needs of students. The second relates to the status hierarchy within schools, a point to be made presently.

2) School ethos was also apparently more systematically transmitted to students in the English schools than in their

Western Australian counterparts. One explanation for this relates to the regular and systematic assemblies held in English schools.

A fundamental difference, one of organizational structure, needs close scrutiny. The typical staff hierarchy pattern in the English schools was five-tiered, namely, headmaster, deputy, sub-school co-ordinator, subject department head and class teacher. The Western Australian structure was four-tiered, namely principal, deputy, subject department head, class teacher.

The effect of the English five-tiered pattern was to emphasise the co-ordinating and welfare functions of the total school programme. The sub-school co-ordinators were House or Year heads or had a variety of other roles, such as that of the Director of Studies in school 7. These teachers, together with the head and deputies, generally constituted the senior staff committee, that of greatest influence. In a typical school situation this would be a committee of say seven, comprising headmaster, deputy 1, deputy 2, head of upper school, head of middle school, head of lower school, co-ordinator of studies.

The effect of the Western Australian four-tiered system was to emphasise paramountcy of the subject department, with its concentration on the teaching role of the school. The influential senior staff committee in this case would comprise at least nine members, including principal, deputies, and all the subject seniors. In the larger schools, there would be considerably more than nine because the number of officially appointed senior teachers, all regarded as equals, would be greater. Such a group tended to subordinate welfare programmes, tended to promote competition and rivalry between subject departments in the Western

Australian schools. Where welfare staff, such as house masters, were invited to participate, the senior staff committee was even larger but the influence of these welfare teachers was quite small since subject seniors jealously guarded their official status and both outvoted and outranked the welfare staff.

The Western Australian framework led to a problem discussed by all eight principals during their interviews, something loosely described as "the power of the senior master". Senior masters (or mistresses) in Western Australia held Education Department, not school, appointments, with secure tenure. Principals frequently saw senior masters as "empire builders" striving to increase their share of the school programme and resources at the expense of other sections of the school. The principal of school 10 described how, when an upper school subject, economics, was in danger of disappearing because of lack of student demand, the subject was blatantly hawked and promoted by the senior master, not so much from a desire to serve the interests of the students but in order to keep a teacher in a job to which he had become accustomed and to maintain staff levels within the Social Studies Department. This "power of the senior master" was also demonstrated in the negotiations taking place at senior staff meetings when subject department interests tended to dominate discussions. Matters of co-ordinating policy not related to subject department needs were given minor consideration. This helps to explain the difficulties of formalising House or Year systems in Western Australian schools. The very nature of a school subdivided into subject departments promotes counter productive fragmentation.

This difficulty was not apparent in the English schools where subject department heads tended to have less influence and their proposals were more likely to be seen by the senior staff meeting in the perspective of the total school programme. Only the most senior of the subject department heads were likely to hold membership of the senior staff committee.

4. TWO AREAS OF COMPARATIVE NEGLECT

The nine identified policy areas were determined by analysis of an eclectic set of school objectives culled from a number of sources. There is little doubt that the expectation of those who frame school objectives is that each of these policy areas is a necessary part of a school programme.

The interviews suggest that two of the policy areas did not generally receive the time, effort or resources devoted to the other seven.

Very little obvious attention was given either to the area of school ethos or to that of staff development in the majority of the sixteen schools. A number of reasons were advanced for this. It was generally claimed, with some feeling, that there were neither the time nor the staff resources to handle all the tasks expected of the school.

As to the area of school ethos, teachers felt that a variety of standards and expectations tended to be accepted and promoted. In view of the pluralistic nature of society this is hardly surprising. The school value system was an area in which staff clearly expected the head to give a lead. Interviewed heads agreed without exception that they should do so and many

claimed to, although often the staff did not feel that this occurred. Heads complained of the impossibility of finding time to do all that was expected of them and a number admitted that this part of their role needed more attention. An outstanding exception was the attention given to this aspect of school policy by the headmaster of school 5. Not only did this school have a written statement on its ethos, the only sample school to possess one, but it was a matter for regular staff discussion. The value system of most schools tended to be advanced incidentally and by means of traditional practices rather than by planned promotion.

Neglect of formal programmes for staff development may similarly be attributed to the time available, both to teachers who may have assumed the leadership roles and to those who may have been the clients of the programmes. The entire school day was fully occupied in the tasks of the school. Staffing policies were such that time was not available for co-ordinating teachers to assume the planning role with any consistency. There were some token efforts, such as in school 1, where a teacher was allocated two periods a week to promote staff development, and in a number of schools where senior teachers supervised juniors, particularly beginners. More of an effort was made with beginning teachers but even those were required to undertake a full teaching load in accordance with the staffing formula imposed by employing authorities.

In one of the schools, number 16, a teacher was assigned full time as a staff development officer, a temporary appointment for two years only which had been made possible by a grant from

the Australian Schools Commission (a national authority independent of the Education Department of Western Australia). This innovation was regarded throughout the school as an outstanding success and both interviewees and other staff spoke with particular enthusiasm of the stimulus that this teacher created through his within-the-school in-service programmes. There was a general feeling that the teachers were performing more effectively as a direct result.

If comprehensive secondary schools claim that the promotion of ethos and staff professional development are organizational objectives then the evidence of sixteen schools is that they tend to neglect these functions. By inference, if the school is to carry out the full array of tasks it has set itself, greater attention ought to be paid to each of these policy areas. It must also be said that the resources to make this possible will have to be found.

B: THE IDIOGRAPHIC DIMENSION: THE TEACHER IN THE SCHOOL

1. THE INFLUENCE OF THE SCHOOL UPON THE TEACHER

The first six hypotheses demonstrate that the school in which a teacher is employed is related to his response to his work. Mean scores obtained for the variables were shown to be significantly higher or lower in some schools than in others.

There are some characteristics of a school over which it has no control. It cannot, for example, change its external environment or its size, two factors seen in various circumstances

to be important. On the other hand, it does control its methods of operation. If it could be demonstrated which controllable factors influence teacher response, it might be possible to take steps to improve the level of staff performance with respect to that variable.

In making conclusions about the reasons for differing response levels from schools it will be necessary to rely on some of the information obtained in the first part of the investigation.

(a) Personal Needs Satisfaction

Schools 5 and 16 scored the highest mean responses for the Needs Satisfaction Index. These two schools had a number of features in common, despite markedly different environment and size. In each the head provided strong, dynamic leadership. In each the expectation was that staff would be heavily involved in goal formulation, decision making, planning and review of the programme. These schools actively promoted their sub-school systems and their documentation of all aspects of organization was carefully maintained. Unlike school 5, school 16 had not been purpose-built and its buildings had had to be adapted to suit the sub-school philosphy.

Schools 6,9 and 13 scored the lowest mean responses for the Needs Satisfaction Index. The outstanding common factor in organizational response was the feeling of staff that they played too small a part in influencing major policies and were dissatisfied as to their level of participation in decision making, planning and review. In none of these schools could the head be described as a dynamic leader, even although, in

schools 6 and 13 staff felt that the head dominated decisions. The heads of these two schools saw themselves as exercising leadership, a view not shared by staff. By contrast, the principal of school 9 kept a low profile and did not claim to maintain a strong leadership style. It is interesting to note that all three schools had excellent buildings and facilities. The quality of the building resources was not apparently a factor.

Analysis of the schools with the highest and the lowest measured levels of staff personal needs satisfaction points to two basic differences.

(i) In the high level schools, the principals displayed strong positive leadership, whereas, in the low level schools, they did not. It would be wrong to assume that this investigation demonstrated specific characteristics of principals that made them stronger or weaker leaders since this was not the point of the exercise. Clearly, the headmaster of school 5 had a very different approach to that of the principal of school 16. Both of these strong leaders utilised their own personality and philosophy in the way that they ran their schools. What they had in common was the extent to which they were able to influence the school and the awareness of staff of the over-riding sense of direction they supplied. Equally, it could not be said that particular characteristics of the heads of schools 6,9 and 13 showed why they were weaker leaders, but this conclusion emerged quite clearly as a result of interviews and school visits. Dynamic leadership would appear to be a valuable asset to the schools that possess it and the importance of the leadership role of the head is emphasised. Leadership characteristics as such have

not been part of this study but it is clear that effective heads work in different ways. There is no one golden rule for successful leaders.

(ii) A second difference between schools with high and low response levels relates to the extent to which staff are involved in all stages of the policy process. What schools 5 and 16 also had in common were the devolution of authority through sub-schooling and careful definition and documentation of the programmes. Schools 6,9 and 13, by contrast, had what could be described as monolithic organizational structures with less apparent evidence of documentation of the programmes. It is concluded that lower levels of staff personal needs satisfaction appear to obtain where staff perceive themselves as being less involved in the policy making process than they would wish to be, and that this can be avoided to some extent by making the administrative unit smaller by sub-schooling. It is pertinent to observe that the figures showed significantly higher levels of personal needs satisfaction in the smaller schools (Hypothesis 4). Whilst it is not possible for the school to determine its size, sub-schooling has the effect of creating smaller administrative units.

(b) Professionalism

The schools with the highest levels of professionalism, as measured by the Professional Role Orientation Scale, were numbers 15,16 and 11, whereas the lowest levels of professionalism were recorded in schools 5 and 1. Common factors relating to these two are that they were small, semi-rural and English; the teachers scored well into the higher satisfaction groups

for the other teacher variables measured. Both schools appeared to demonstrate a strong sense of teamwork and effectiveness and their identification as having the lowest mean levels of staff professionalism again emphasises the fact that the scale is measuring some sense of conflict with authority.

Observation suggests that the two schools had very different leadership and management styles, the head of school 1 evincing a lower profile than that of the head of school 5. It is difficult to identify similarities.

Features common to schools 15,16 and 11 also appear to be environmental rather than organizational. They are large, suburban and Western Australian. On the last point, only one English school scored above the sample mean on the scale, school 7, and this also was large and suburban. However, it must be noted that there were also large suburban schools, both Western Australian and English, which scored below the mean. The organizational styles of the four schools mentioned appear so different as to inhibit a listing of similarities.

It is concluded that although differences in the Professional Role Orientation Scale scores are shown to be statistically significant between schools, this particular investigation has been unable to identify factors which lead to these differences. Those most readily seen are environmental factors over which the school has little control.

(c) Participation

Use of the Participation Index showed the degree to which participation approached the ideal. On the mean scores, teachers in schools 2,16,15 and 3 showed the lowest levels of

deprivation and teachers in schools 11,10,13 and 7 showed the highest levels.

The identification of these schools indicates that the role of the principal is certainly a critical factor. In each of the four schools of greatest deprivation, staff regarded the principal as tending to make autocratic decisions and saw their own influence as limited. By contrast, principals in schools 2 and 16 made special efforts to involve staff in decision making procedures; the principal of school 15 allowed internal organizational decisions by subject department heads; and the headmaster of school 3, who had recently taken over the school, allowed existing procedures to continue.

Another feature common to schools of least deprivation was the extent to which sub-schools operated. Schools 2,16 and 3 had well defined sub-school systems, heavily orientated towards academic performance, whilst school 15 relied on a departmentalisation of the school through its subject areas. By contrast, the schools of greatest deprivation did not espouse a sub-school structure.

The evidence is that higher levels of satisfaction with staff participation occur in schools where the principal is not seen as autocratic and where he makes efforts to involve staff in decision making procedures. The devolution of authority through a sub-school system also appears to offer the opportunity for less deprivation in terms of participation. This conclusion reinforces the situation revealed with respect to personal needs satisfaction. The fact that the variables, personal needs satisfaction and participation, were also shown to be highly

correlated does indicate that similar causes for the high response level ought to apply. As has been shown, they do.

2. THE INFLUENCE OF THE SCHOOL ON THE RELATIONSHIP BETWEEN MEASURED VARIABLES

Of the hypotheses, 7,8 and 9, those involving the Professional Role Orientation Scale were confirmed in the null form, that is, there was no significant relationship. All the evidence provided by scores for the professionalism variable point to it being related more to personal than to school factors. This would help to explain the very low relationship between schools of scores for professionalism and the other variables (Hypotheses 7 and 9).

On the other hand, personal needs satisfaction and desired level of participation were significantly correlated by school. Thirteen of the sixteen schools were either high or low for both variables, as indicated below.

Schools 1,2,4,15 and 16 had mean scores showing above the sample average levels for both personal needs satisfaction and desired level of participation. Finding similarities between these schools is complicated however by the intricate issues involved. There are apparent contradictions. The headmaster of school 4, for instance, had the reputation of being autocratic, whilst the other heads did not. At the same time, his school was large and there was clear evidence of a dissemination of authority. All six schools had discernible sub-school structures, even although schools 4 and 15 appeared to operate theirs through subject departments rather than pastoral organization. Common

factors of environment, size, type of client, do not apparently exist.

Schools 6,8,9,10,11,12 and 13 had mean scores indicating below sample average levels of personal needs satisfaction and desired level of participation. Again, common factors are difficult to identify. Certainly some of the heads, notably those from schools 6,10,11 and 13, were seen as tending to be autocratic and none of the other heads in the group, (schools 8,9,12) were seen as providing strong, positive leadership. It could be argued that these were the schools showing least evidence of sub-school organization but the exception to this would be school 8, where it had been purpose-built for a House system which appeared to operate effectively.

The evidence implies that high levels of personal needs satisfaction, together with teacher participation at desired levels, will be promoted in schools where

a) the headmaster or principal displays strong, positive leadership which uses and encourages the involvement of staff; and

b) there is a devolution of authority by means of some effective sub-school system.

The issues are complex and point to the difficulty of analysing involved interrelationships by means of simple factors.

3. THE INFLUENCE OF PERSONAL CHARACTERISTICS OF TEACHERS ON SCORES FOR THE DEPENDENT VARIABLES

Hypotheses 10,11 and 12 demonstrate that personal teacher circumstances lead to differing responses to the dependent

variables. Identification of the characteristics which affect response may be used to help formulate strategies designed to improve teacher performance.

Some of the teacher characteristic groups are closely related. High status teachers, for example, are almost inevitably older and more experienced; female teachers appear to suffer a status disadvantage; and teachers who have served for a long period in a school are older. The interdependence of some groups of teachers on others needs to be taken into account because, in many cases, the same teachers are identified in different groupings.

(a) Personal Needs Satisfaction

The least satisfied groups have been shown to be females, younger teachers, less experienced teachers, teachers new to a school, teachers of lower status.

Whilst such findings may not surprise, they do lead to a conclusion that schools ought to make particular efforts to encourage the development of such staff.

According to the evidence, the most satisfied teachers are males, older teachers, more experienced teachers, teachers of longer tenure in a school and teachers of higher status. An examination of this list shows considerable overlap with a number of these categories describing the same people. The point here is that school administrators may be assisted in their determination of priorities if they are aware of those staff most likely to be satisfied by the circumstances of their position as well as knowing which are less likely to be satisfied.

(b) Professionalism

The finding that teachers with the highest status display significantly less professionalism is difficult to reconcile with the commitment to their profession that such have apparently made. The explanation may be found in the nature of the status positions but, as has been pointed out, it is more likely the result of the focus of the items in the Professional Role Orientation Scale. Status positions demand the dual role of administrator and teacher. The scale concentrates on the teacher role but denigrates the bureaucratic function that may be an inherent part of what many would regard as professionally orientated administration. In this sense, the administrator spends less time on his teaching functions because he is forced to spend more time on management. High status teachers have less contact with the client than classroom teachers because of administrative duties.

It is concluded that the Professional Role Orientation Scale may not be an effective measure of professionalism for teachers with administrative responsibility because of a bias it displays against one of their major roles.

On the other hand, the failure by teacher-administrators to score high on the professionalism scale as measured does pinpoint the need for them to be aware of the extent to which their administrative functions may divert their commitment from professional ideals.

(c) Participation

Conclusions about participation may be deduced from an analysis of those groups shown by the Participation Index to be most deprived in terms of their desired level of involvement.

The evidence that females, younger teachers, less experienced teachers, teachers of lower status, teachers with shorter service in a school, teachers of fine arts, commerce and home economics are most deprived points to a need to focus special attention on such groups.

The results for both personal needs satisfaction and participation show the teacher characteristic groups with the least satisfactory level to be very similar and this will lead in due course to a number of recommendations for possible use by school and system level administrators.

4. RELATIONSHIP BETWEEN DEPENDENT VARIABLES

Of the three hypotheses, 13,14 and 15, those variables correlated with the Professional Role Orientation Scale showed significant but low level correlation. For this reason it seems unwise to make firm conclusions relating to the professionalism variable.

On the other hand, correlation between the mean scores of all teachers on the Needs Satisfaction Index and the Participation Index is sufficiently significant and relatively high to warrant further comment. Personal needs satisfaction and desired degree of participation would seem to be interdependent to the extent that teachers either tend to be mutually satisfied or dissatisfied with respect to both.

Such a conclusion also suggests that any move to improve the level of one variable should enhance response to the other. Schools which manage, for example, to increase the degree of participation of those teachers who desire to participate more

will almost certainly raise the level of personal needs satisfaction. Similarly, finding ways of improving personal needs satisfaction should have a positive effect upon the desired degree of participation.

THE INTER RELATIONSHIP OF THE TWO DIMENSIONS

The interdependence of the institutional and personal aspects of the school was established at the beginning of this study. The research model specifically identified three pairs of interacting elements: the particular school and the teacher; the role of the school and the personality of the teacher; the expectation of the school and the needs disposition of the teacher. Although for logical convenience these will be discussed in turn, it is obvious that nearly every aspect of the school penetrates nearly every other aspect. The comprehensive secondary school has been demonstrated to be a complex organization attempting to achieve an array of objectives by means of a variety of techniques.

(1) THE SCHOOL AND THE TEACHER

An assessment of the peculiar characteristics of each school was obtained in a number of ways. In the interviews with staff, specific questions about organizational features were asked. During the period of observation and participation, other features of the school were noted. Statistical details, such as the number and types of teachers and the number of students, were collected. Features of class organization, location and

environment of the school were ascertained. These combined factors, together with the impression of the school gained by the researcher, supplied a wealth of background on each. The conclusion that every school has individual characteristics which make it different to any other was sustained by the evidence,

The reaction of the teacher to his school was measured by means of the Needs Satisfaction Index which established the extent to which his needs satisfaction approached his ideal. It was demonstrated that differences between school mean scores for this variable were statistically significant, that is, that teachers did respond differently to different schools: in some, teachers felt greater satisfaction; in others they felt less. In examining these differences it was seen that those schools in which the principal displayed positive leadership, in which the staff had involvement in all stages of the policy process, in which there was devolution of authority through some form of sub-school system, were the ones in which the highest levels of personal needs satisfaction obtained. Conversely, lower personal needs satisfaction occurred in schools where staff did not feel involved in running it, where the head did not display leadership qualities even where this was seen as autocratic, and where the sub-school system was not highly developed.

The evidence suggests that the organizational pattern of schools can be manipulated to ensure higher levels of staff satisfaction. A conscious effort by the head to exercise leadership, a willingness to allow staff to share in decision making and other policy procedures, and the provision of sub-schools appear to be suitable ingredients.

The conclusion that allowing staff to participate at their desired level enhances their needs satisfaction is reinforced by the high correlation by school of these two variables, as demonstrated by the testing of Hypothesis 8.

Schools may also improve the personal needs satisfaction of teachers by being aware of those whose personal characteristics disadvantage them. Females, younger teachers, less experienced teachers, teachers new to the school and lower status teachers were all seen to have lower levels of personal needs satisfaction. By paying special attention to these types of teachers, by contriving to cater for their special needs, schools may raise the general level of personal needs satisfaction.

This study so clearly shows that personnel interact with the organizational structure that the onus on schools to use organizational strategies to enhance the position of teachers is amply demonstrated.

(2) ROLE AND PERSONALITY

The role of the school was described in terms of school objectives which were in turn categorised into nine major policy areas. The personality of the teacher as related to school objectives was investigated with respect to a measurement of professionalism.

Specific interrelationships involving scores on the Professional Role Orientation Scale were not readily identified. It was shown that mean scores for this variable differed from school to school. Of those for which professionalism was seen to be low, environmental factors (their size and location) were the common ingredients. Over such characteristics the school

has little control. Schools in which professionalism was seen to be high appeared also to have environmental factors in common; they were large and suburban. Neither those in the high nor the low category displayed common organizational or leadership traits. None of the nine policy areas was demonstrated specifically to affect scores on the professionalism scale. The neglect by schools of staff professional development should be noted at this point.

It must be concluded that although professionalism is a personal characteristic which the school does appear to influence, this particular investigation has not shown which school characteristics, other than the environmental ones, contribute to the professionalism of the teacher.

Further work needs to be done on the interrelationship of role and personality.

(3) EXPECTATIONS AND NEEDS DISPOSITION

The expectations of the comprehensive secondary school have been seen in terms of a sequence of events that translate objectives into effective action. This policy process embraces more than the operational stage, even if this may be regarded as its raison d'etre.

The needs disposition of the teacher within the school has been measured in terms of a Participation Index, a scale representing the extent to which a teacher achieves desired levels of participation in policy making. The specific items of the test instrument relate to all stages of the process except the operational stage.

The interrelationship between what the school does and the involvement of teachers in the action has been shown to vary significantly for different types of teachers and in different schools. The groups are virtually identical to those recognised in sub-head (1) above, "The School and the Teacher" (pp.274-276). To the list of disadvantaged teachers must be added those in certain subject areas. Otherwise, the groups are the same.

Conclusions that certain types of teachers and those in certain types of schools are less likely to participate to the extent that they desire have clear implications for administrators. Once such teachers or circumstances have been recognised, attempts to modify the situation ought to lead to improvement. The proposition is that focussing attention on the teachers most at risk with respect to this variable enables them to make a more satisfactory response to the organization. Awareness by administrators of factors contributing to inadequate staff performance should further the effort to help teachers make a better contribution to the school and its output. Administrators need to be aware that there is a relationship between the way the school works and the extent to which teachers approach their desired level of participation.

This particular investigation has been able to establish that a relationship between school expectations and personal needs disposition does exist. It has also identified personal and school characteristics most likely to lead to a feeling of teacher deprivation in terms of participation.

IMPLICATIONS FOR FURTHER RESEARCH

A holistic approach has been attempted on the assumption that there was a case for the analysis of the comprehensive secondary school as an operational institution. The utilisation of specific factors of function and personnel has enabled a number of interrelated facts to be identified. The claim is not made that conclusions represent more than a partial analysis. For this reason, further studies of the school as an organizational microcosm are both warranted and necessary. The bird's eye view tends to highlight different details at different times. It depends upon the viewpoint of the beholder and the research models employed. Specifically, this approach shows new elements, trends or aspects perhaps not visible during an examination of the parts. Schools are evolving and change needs to be seen in its overall perspective. Throughout, the author has assumed that the examination of the whole, despite its complexity, is a more valuable exercise than the dissection of the parts. Even although the latter has its place, the principal has limited time in which to pursue all the finer details. School administrators are interested in as many perspectives as possible of the organization they are called upon to supervise.

The study has shown the apparent usefulness of two methods of investigation assumed by some to be incompatible. The internal consistency of results (within sixteen schools) of controlled observation and interview on the one hand, and quantitative measurement utilising research instruments on the other, implies the suitability of either method for organizational

analysis. Each may be recognised as useful for the contributions it can make.

Specifically, this study has shown the validity of two of the research instruments employed. The Needs Satisfaction Index and the Participation Index survived every test of reliability and consistency applied. The concept of a ratio between actual and ideal responses enabled these variables to be measured in terms of personal perceptions rather than as scores differing subjectively from respsondent to respondent. These tests could be applied to other research with some confidence.

On the other hand, Corwin's Professional Role Orientation Scale did not meet the criteria expected of it for this study. Not only did doubts emerge as to what the scale was measuring but statistical tests for reliability produced disappointingly low correlation. At least in English and Western Australian conditions the use of this instrument for further research cannot be recommended. The instrument seems particularly unsuitable for use in testing the professionalism of administrators.

This study appeared to have erred in placing confidence in the Corwin test instrument for its purposes. Comprehensive secondary schools were not shown to be torn apart by teachers striving to gain professional autonomy in the face of bureaucratic procedures, an emphasis implicit in the Corwin measure. The conclusions suggest that the comprehensive secondary school is complex, has a degree of autonomy in its own right and that the functions of teachers at all levels of the hierarchy tend to be co-operative and supportive. The administrative and educational roles of the school appeared to be interrelated. At least within

the context of comprehensive school organization further investigation on the nature and measurement of professionalism would appear to be warranted. More notice should be taken of the definition problem identified by Hoyle (see p.235). As he suggested, responsibilities rather than rights should be the key.

The assumed interrelationship between the role of the school and individual personality has been the most difficult part of the research model to sustain, even although conclusions on this point are not completely barren. The fact that results on the Professional Role Orientation Scale do vary from school to school, without any apparent consistencies between schools with like results, suggests that school mean scores may be more dependent on personal characteristics of respondents than upon organizational features. Such a conclusion is consistent with the original assumption that role and personality are interdependent. This part of the investigation was complicated by the fact that school role was conceptualised in terms of no less than nine interlocking policy areas, whilst personality was adjudged by the use of an instrument of doubtful reliability and validity. This part of the analysis must be assumed to be incomplete because of lack of sufficient information, and to be unsatisfactory because of failure to establish firm conclusions. It is therefore recommended that further research on the relationship between institutional role and staff personality within the comprehensive secondary school be undertaken.

In general terms, analysis of the school organization is a necessary exercise which should be regularly undertaken

in view of the evolving nature of the enterprise. The results of such analyses ought to lead to improvement in administrative techniques.

One particularly valuable extension of this research would be further investigation into the effects of sub-schooling on school effectiveness. The evidence of the research clearly indicates the worth of sub-schooling as an organizational strategy for the effective operation of the large comprehensive secondary school.

IMPLICATIONS AND RECOMMENDATIONS RELATED TO SCHOOL ADMINISTRATION

In looking at sixteen comprehensive secondary schools, this study has been able to confirm that each displays discernible differences. It has also shown that despite external influences, internal factors are the prime determinants of operational strategy.

The investigation has also underscored the extent to which teaching staff respond to and interact with the peculiar features of the school in which they work. Scores for each of the variables assessed differed significantly by school. Such variations could not have occurred by chance and must have been the direct response of teachers to their varying circumstances.

The implication of these conclusions is that an effective administrative style generates a better performance by staff. Schools need to be aware of the right sort of stratagems to promote.

This study has identified some features which appear to lead to more satisfactory levels of teacher response to the

variables measured; it has shown some neglected areas of the school role; it has identified teachers who appear to be disadvantaged in their school circumstances. What follows is a series of recommendations for school and system level administrators based on the findings and conclusions of this study.

1. LEADERSHIP

Whilst this was not a study in leadership, the importance of the quality of school leadership was demonstrated. Higher scores in the Needs Satisfaction Index and the Participation Index occurred in those schools in which the principal was observed to display strong, positive and dynamic leadership. Conversely, the lowest scores obtained where the principal either showed a low profile or was seen as having an autocratic style, a trait not seen as synonymous with leadership. The interviews demonstrated the extent to which the headmaster was seen by staff as a key figure in the school. There was no resentment of veto powers; there was a genuine expectation that the head would lead.

As indicated earlier, studies in leadership are numerous. The collective evidence is that it is unwise to prescribe to leaders. What works for one may not work for others. Effective leadership style is a combination of circumstances and the leader's personality. It goes beyond the scope of this research to make any other than generalised recommendations about leadership. Nevertheless, the evidence is clear enough to stress to school administrators the critical nature of the role and to emphasise to system level administrators the importance of careful selection

and training of school administrators. The following recommendations emerge.

Recommendation 1: It is recommended to comprehensive secondary school principals that they give high priority to their leadership role, that they review their leadership performance regularly and that they take part in such professional development as will enhance their performance as leaders.

Recommendation 2: It is recommended to Education Authorities that, no matter what their methods for selection of comprehensive secondary school principals, heavy emphasis should be placed on the leadership potential of the candidate. It is further recommended to these authorities that provision for the initial training and in-service retraining of school principals be regarded as essential to maintain the standards of schools and that such training give due and proper emphasis to the leadership role.

2. INVOLVEMENT OF STAFF IN THE POLICY PROCESS

Interviews made it clear that many staff at all status levels desire involvement at various stages of the policy process. It was also obvious that not all staff seek this involvement. These conclusions are substantiated by responses to the Participation Index. The fact that most staff felt deprived to some extent, as measured by the Index, must be heeded.

One of the problems of school functioning is that, whereas all teachers are involved to some extent in the operating stage, opportunities for participation in the other four stages are limited by the time available and by the practicalities of carrying out the total requirements.

It is pertinent to reiterate that the schools in which higher mean scores for the Needs Satisfaction Index and the Participation Index were found, were those where staff felt they were involved in various stages of the policy process. Conversely, lower mean scores prevailed in schools where the same degree of involvement was not felt.

Much discussion in the interviews evolved around the decision making stage of the policy process. It was seen, for instance, that major changes to the assessment procedure, to be effective, required considerable staff negotiation and discussion. Questions relating to the use of staff meetings indicated that teachers valued these, although perhaps not at the whole of school level in the larger schools. The reason that meetings were valued was related to the contributions that individuals felt able to make.

Another conclusion arising from the interviews related to the particular areas where staff sought involvement. It was seen that staff felt involved in curriculum/syllabus areas and that these were not bones of contention. It was also seen that staff did not seek involvement in public relations because they felt it to be outside their sphere of interest. From this it may be inferred that the involvement of staff should be sought in areas pertinent to the particular teachers.

From this discussion the following recommendations emerge.

Recommendation 3: It is recommended that comprehensive secondary schools make adequate provision for the involvement of teachers in all stages of the policy process. Staff should not be compelled

to participate in areas which they do not consider relevant to their own part of the organization but the opportunity should be created for those who do wish to be involved. Particular emphasis should be given to staff input, to goal formation, decision making, planning and review.

Recommendation 4: It is recommended to Education Authorities that, in considering the staffing formula and conditions for comprehensive secondary schools, provision be made for teachers to spend time on school-based policy making procedures and that it be recognised that such time is an investment in the quality of the education that schools are able to provide.

3. DISADVANTAGED TEACHERS

The evidence is that certain types of teachers feel disadvantaged by the operating procedures of schools. The statistical analysis showed that some specific groups felt less satisfied, participated less than others. It would seem important that school administrators are aware of teachers whose performance is likely to be affected. Female teachers, young teachers, less experienced teachers, low status teachers, teachers new to the school produced significantly lower mean scores on the Needs Satisfaction Index and the Participation Index. In addition, teachers of fine arts, commerce, home economics produced significantly lower mean scores on the Participation Index. A number of these groups, it has been seen, are interrelated. From this evidence the following are recommended.

Recommendation 5: It is recommended that comprehensive secondary schools make particular provision to involve in the policy process

female teachers, less experienced and low status teachers, and teachers of fine arts, commerce and home economics.

Recommendation 6: It is recommended that schools make particular provision for the assimilation into the school of beginning teachers and teachers new to the school. In the case of beginning teachers, this could involve a lower teaching load of, say, one class less than that expected of an experienced teacher.

Recommendation 7: It is recommended to Education Authorities that, for purposes of the staffing formula, beginning teachers in their first year in comprehensive secondary schools be counted as less than one teacher in order that schools may relieve them of the need to teach the same number of classes as experienced staff.

4. DEVOLUTION OF AUTHORITY

Schools which obtained the most favourable mean scores in terms of the Needs Satisfaction Index and the Participation Index had in common the organization of the school into sub-schools. Conversely, schools in which these scores were the least favourable did not exhibit this characteristic.

At the subjective level of the school visit and interview, those schools in which such sub-schools operated most obviously also gave the appearance of being the most effective.

Another supporting observation is the common method of disbursing funds for which sub-sections of the school are held responsible. It was claimed that in none of the schools was the spending of recurrent monies a controversial issue. Similarly, it was shown that with syllabus control largely in

the hands of teachers, there was general satisfaction with this part of the school programme.

The high correlation of scores from the Needs Satisfaction Index and the Participation Index reinforces the viewpoint that teachers who are involved and satisfied to the desired level give a more satisfactory performance in the school. Devolution of authority helps to assist in promoting these personal requirements.

Such conclusions infer that school and system level administrators should promote sub-school systems in which there is a delegation of authority. This does not specify what forms the sub-schools ought to take. The investigation showed both vertical and horizontal divisions to work well in different schools. Sub-schools break down large institutions into smaller units, tend to make the teachers more involved and more satisfied, and enable the school to play its welfare role more effectively. The following emerge.

Recommendation 8: It is recommended that, where possible, comprehensive secondary schools be organized into suitable sub-schools in order to enhance the involvement levels of staff.

Recommendation 9: It is recommended that Education Authorities, in planning and maintaining comprehensive secondary schools, make provision for the establishment and staffing of these along sub-school lines. This has specific implications for building design and the structure of the staff hierarchy.

5. CO-ORDINATION OF THE PROGRAMME

One of the differences between the hierarchy structure

of English and Western Australian schools is the absence of intermediate level co-ordinating teachers in the latter. It was seen that in the English schools a teacher of higher status than that of subject department head co-ordinated the sub-school programme and was a member of the senior staff committee. In the Western Australian schools, it was noted that subject department rivalries tended to influence unduly decisions and discussions at the senior staff level. Western Australian schools are noticeably more subject dominated than their English counterparts.

This particular bias is emphasised in Western Australian schools for a number of reasons. Historically, subject expertise for its own sake was all important in the pre-comprehensive era. Subject department heads were appointed from the very beginnings of the comprehensive schools in 1958. It gradually became an administrative convenience for specialist superintendents to arrange the staffing of specialist teachers, thus reinforcing the importance of subject specialisation of staff. By the late 1960's, school building designs followed the trend with a number of so-called "faculty" schools being built. Each subject department had a separate building. This became the vogue and throughout the State schools organized themselves along faculty lines. The building design was abandoned by the mid 1970's in favour of one emphasising horizontal sub-schools but, up to the present time, commensurate senior appointments have not been made. The dominance of the subject department head endures.

In their interviews, the eight Western Australian principals were unanimous that departmentalisation of the school was detrimental to their attempts to provide the best overall

programme for their students. The difficulties inherent in establishing welfare programmes were acknowledged by all. "Empire building" of the subject for the subject's sake was seen as a problem. It was difficult to establish a new subject that did not fit under the umbrella of an existing department.

This is seen as a specifically Western Australian problem, so it is pertinent to refer to school 16. Unofficially sub-school heads were appointed and given internal status advantage over subject senior teachers. In the analysis of all three variables, mean scores for school 16 were particularly high. Staff were high on satisfaction, participation and professionalism. Such a level of response, it has been assumed throughout, is indicative of the capacity of the staff to perform more effectively, a conclusion verified in subjective terms in the school visit and interviews. School 16 is a very effective Western Australian school. Like its English counterparts, it places high emphasis on co-ordinating roles. From this discussion emerge the following.

Recommendation 10: It is recommended that comprehensive secondary schools find ways and means to promote co-ordinated programmes; in particular, by deflecting emphasis away from subject department rivalries. The appointment of sub-school heads above the status of subject senior teacher is an ideal to be sought after in negotiation with the Education Authority.

Recommendation 11: It is recommended to the Education Department of Western Australia that it re-examine the status hierarchy of staff in comprehensive secondary schools with a view to the appointment of co-ordinating teachers of higher status than that of subject senior.

Recommendation 12: It is further recommended to the Education Department of Western Australia that it re-examine the method of staffing comprehensive secondary schools with a view to diminishing the control over staffing by specialist superintendents. The capacity of the Department to make a number of general appointments should be improved.

6. AREAS OF NEGLECT

Two of the policy areas receive less emphasis than the other seven. This was justified by apologists during the interviews in terms of the capacity of schools to achieve everything expected of them. It is generally felt that there are insufficient time and staff resources to pursue all the aims and objectives of schools thoroughly. The two areas that suffer particularly are those of ethos and staff development.

a) Ethos

There is little doubt that the development and maintenance of a school ethos must revolve around the principal. Heads, in particular, feel that demands on their time are excessive. Nevertheless, if this area of policy is to be effectively promoted, time must be given to its planning and implementation. During interviews, school assemblies and various ways for maintaining traditions were noted as methods of inculcating a school ethos.

Two of the sample schools stood out as being able to define their value systems. Their apparent success, together with their high levels of response to the variables satisfaction and participation has already been recognised.

The implication is that if schools say that they aim

to promote a value system, then they ought to put this into practice. The following emerges.

Recommendation 13: It is recommended that comprehensive secondary schools compile a written statement of school ethos and that they actively promote it to the point where staff and students are aware of its major tenets.

b) Staff Development

The apparent failure to promote internal professional staff development robs the school of an opportunity to promote its school-based objectives. Staff entirely reliant on external courses have the opportunity to bring new ideas back to the school but doubt persists about the extent to which these ideas are shared. A number of teachers take little or no part in external courses. Opportunities are limited.

This current investigation failed to identify those factors that promoted high response to the professionalism variable. Whilst it was seen that the mean scores varied significantly by school, no satisfactory explanation was forthcoming. It is surmised that one possible way of promoting higher levels of staff professionalism resides in making a greater effort to sponsor school-based staff development.

Finding time to carry out formal programmes within the school is not easy. Students have to be taught and community resentment arises when classes are dismissed. Unless teachers can be persuaded to give up their own time, whole of school in-service development seems impracticable. The solution found by school 16, the appointment of a teacher with a special brief to foster curriculum and teacher development had a most stimulating

effect. With the willing co-operation of staff, this resource teacher created opportunities for professional growth within the school.

Education Authorities may view the appointment of such teachers to all schools as an extravagant and expensive option. Nevertheless, if the professional development of staff is a school objective, then the evidence of this investigation is that it is not receiving proper attention. Accordingly, the following suggestions emerge.

Recommendation 14: It is recommended that comprehensive secondary schools actively promote internal programmes of staff professional development, particularly those related to the policies and workings of the school.

Recommendation 15: It is recommended that Education Authorities examine their professional development policies with a view to improving the capacity of schools to maintain internal programmes. It is suggested that not all the resources made available by Authorities for in-service education should be channelled into external courses.

7. ENVIRONMENTAL FACTORS

Schools make some small impact upon their environment but, substantially, they are dominated by it. A school is large or small, urban or rural, in an industrialised or residential area, largely by virtue of factors outside its control.

This investigation showed the extent to which schools adapted to their prescribed environment. Teachers in small schools felt highly involved, teachers in rural schools identified with

their community, schools in a professional/academic area responded to the ambitions of parents, and so on.

No firm recommendations on adaptation to the environment will be made but the results of this study imply that every school should be geared to take advantage of those environmental factors which work in their favour and should be aware of those environmental circumstances which detract from their operation. One of the encouraging facts to emerge is the apparent success of schools, such as number 2, which, while appearing to have every possible environmental disadvantage, are able to provide a supportive education programme to the students within a co-operative organizational climate.

AFTERWORD

> ".....tomorrow's individual will have to cope with even more hectic change than we do today. For education the lesson is clear: its prime objective must be to increase the individual's 'cope-ability' - the speed and economy with which he can adapt to continued change. And the faster the rate of change, the more attention must be devoted to discerning the pattern of future events."
>
> (Toffler, 1970, 6th Printing 1973: 364)

Schools today do not always enjoy the unlimited confidence of the people whom they serve. This is not only inevitable, it is necessary. Since their task is so crucial to the community, it is right and proper that they should bear scrutiny and criticism. It is a function of society that the standards of its service organizations must be upheld.

What is not always well understood is the magnitude of the tasks assigned to the comprehensive secondary school, a fact which has been manifest since the earliest stages of this investigation. Further more, unless there is a radical change of direction, a possibility that cannot be discounted in this electronic age, schools will be called upon to play an ever-expanding role in servicing the educational, social and welfare needs of the pupils entrusted to them. To do this, they will require the facilities, the technology and, above all, the personnel necessary to translate their goals into effective action.

The study has shown that schools have the **potential** to adapt to changing needs, they have the **capacity** for making important choices, they have the **expertise** to enable them to

carry out their functions. At the same time, it has disclosed certain shortcomings in areas vital to forward-thinking aims to which they must address themselves.

The overall impression created by sixteen randomly chosen comprehensive secondary schools is that there is good reason for optimism about the ability of the system to provide for the requirements of future generations. There is no room, however, for complacency.

APPENDIX A: ORGANIZATION THEORY CLASSIFIED ACCORDING TO THE PARTICIPATION CONTINUUM

CLASSIFICATION	CONTRIBUTOR OR TECHNIQUE	RELEVANT CONTRIBUTION
1. Classical Theory	F.W. Taylor	Scientific Management, Efficiency, High Productivity, High Profits
	Fayol	Planning, Organizing, Commanding Coordinating, Controlling
	Gulick	POSDCORB
	PPBS, PERT	Modern Examples of Scientific Management
2. Economic Theory	Cyert & March	Level of Economic Profit
Mathematical Models	Sayles	Importance of Technological Emphasis
	Walker & Guest	Classification according to Type of Technology (Technology determines structure)
	Woodward	Organization as a Socio-technical System
	Trist	
	Burns & Stalker	
	Miller & Rice	
	Perrow	
	Mathematical	Modern Example
3. Decision Approaches	March & Simon	Decision as the Basis for Organization
	Tannenbaum	Leadership and Decision
	Decision Theory	Modern Examples
	Decision Analysis	
4. Human Relations Approaches	Follet	The Motive of Service. Saw the importance of the individual
	Mayo	The Hawthorne and Bank Wiring Studies showed the complexity of humans in organization
	Bennis	Change in Bureaucracy
	Lawrence & Lorsch	Organization Development
	Drucker, Humble	Management by Objectives
	Whyte	The Primary Groups

continued

APPENDIX A (continued)

5. Behavioural Sociological Approaches	Weber	Bureaucracy, Authority Structures (pioneer in general social science viewpoint)
	Barnard	The Importance of Persons, Communication
	Parsons	A Social System: Goals, Power, Professionalism
	McGregor	Theories X and Y
	Maslow	Hierarchy of Needs
	Likert	Motivation
	Blau & Scott	Concept of Prime Beneficiaries
	Etzioni	Synthesis of Scientific Management, Human Relations, Compliance
	Lippit & White	Leadership
	Argyris	Group Interaction, Individual versus Organization, Importance of Personality
	Getzels & Guba	Dual Importance of Organizational Expectations and Personal Needs. Administration as a Social Process
	Katz & Kahn	Systems Approach with Psychological Emphasis. Importance of Communications
	Herzberg	Theory of Motivation
	Dubin	Network Analysis
	Halpin	Leadership, Climate
	Sadler	Leadership
	Gross, Coser	Conflict
	Merton, Selznick & Gouldner	} Behavioural Dysfunctions of Bureaucracy Professionalism
	Presthus	Psychological Anxiety
	Pugh	Multi-level Analysis, Structure, Groups, Interaction
	Silverman	"Action" Frame of Reference
	Greenfield	Phenomenonological Perspectives

APPENDIX B:SUMMARY OF SCHOOL OBJECTIVES

A: THE DEVELOPMENT OF THE PUPIL

To advance his personal competence through:

a) the acquisition of necessary basic skills and knowledge
b) the development of intellectual skills
c) the development of physical and mental health
d) emotional growth
e) spiritual and moral growth
f) the development of recreational and creative skills
g) helping to achieve self-confidence
h) developing a sense of responsibility towards himself

To advance his role in society by:

a) developing a sense of respect for others
b) developing a capacity to recognise achievement
c) developing his capacity for interpersonal relationships
d) developing a sense of responsibility towards others

To advance his economic competence by:

a) equipping him with suitable qualifications
b) giving him necessary vocational guidance
c) providing him with requisite economic skills
d) developing in him a sense of economic responsibility

To advance his civic competence by:

a) developing a sense of civic responsibility
b) developing a sense of responsibility towards his environment
c) helping to understand the interdependence of man upon man
d) helping to understand changes in society
e) helping to understand the democratic processes

B: THE DEVELOPMENT OF THE SCHOOL

To operate effectively by:

a) providing a suitable organizational structure
b) promoting co-operation among staff and students
c) making provision for development, innovation and change

APPENDIX B (continued)

d) providing the necessary resources
e) integrating the total school programme
f) using resources efficiently
g) involving staff and students in policy formulation

To cater for the welfare of students by:

a) providing a secure environment
b) maintaining a pastoral programme based on personal needs
c) providing courses based on personal needs
d) involving them in corporate activities
e) helping them to set personal goals
f) evaluating their progress

To cater for the welfare of staff by:

a) providing a secure teaching environment
b) providing for their professional development
c) defining their roles
d) involving them in the total school programme

To cater for the expectations of society by:

a) providing a service responsive to community demands
b) maintaining an authority structure compatible with a democratic society
c) being part of (and not apart from) the community
d) making the education of each child of equal value
e) establishing a code of ethics based on consideration for others, the law, the environment, moral principles
f) maintaining the reputation of the school
g) setting and sustaining high standards

APPENDIX C: NINE POLICY AREAS OF THE SCHOOL IDENTIFIED AND DEFINED

1. THE CURRICULUM by which is meant both the total school academic programme and the individual subject syllabuses.

2. THE ASSESSMENT PROCEDURES used for judging student performance, recording the results and reporting them.

3. STUDENT GUIDANCE AND WELFARE embracing the whole process of student counselling and those areas commonly referred to as pastoral care.

4. THE ORGANIZATIONAL STRUCTURE by which is meant the method of dividing the school into convenient staff and student groups for the running of the institution.

5. THE TIMETABLE which allocates the division of staff and student time. The time made available for various activities is regarded as a true indicator of the school's priorities and, conversely, the school uses the timetable to translate its objectives into practical terms.

6. THE ETHOS by which is meant the ideals, beliefs value system upon which the school is based.

7. RESOURCES to the extent that schools can exercise control over their selection and use.

8. STAFF DEVELOPMENT by which is meant those aspects concerned with staff welfare. The term refers to situations in which the school provides a leadership or supportive role for the personal professional progress of teachers and support staff.

9. PUBLIC RELATIONS refers to the communication system that is established between the school and its environment, particularly those aspects in which the school takes the initiative.

APPENDIX D: VARIOUS DEFINITIONS OF THE TERM "POLICY"

Oxford Dictionary (1961 reprint)

"An organized or established system or form of government or administration. a course of action adopted or pursued."

Longmans English Larousse (1968 edition)

"A selected, planned line of conduct in the light of which individual decisions are made and co-ordination achieved."

D. Katz and R.L. Kahn (1966: 259)

"Organizational policies are abstractions or generalisations about organizational behaviour at a level which involves the structure of the organization."

T. Parsons (1956: 75,76)

"By policy decisions are meant decisions which relatively directly commit the organization as a whole and which stand in relatively direct connection to its primary function. They are decisions touching such matters as determination of the nature and quality standards of "product", changes in the scale of operations, problems of the approach to the recipients of the product or service, and organization wide modes of internal operation."

Parsons sees policy decisions as taken with respect to the functions of the organization.

Thomason (interpreting Tannenbaum 1970: 61)

"Directive decisions are those decisions which determine what shall be the objectives sought in any endeavour and what standards shall be applied to the assessment of adequate performance in the pursuit of these objectives."

Houghton (Open University: Course E221, Pt.1)

"A policy embodies both the underlying stable aims which affect a series of decisions in a particular area of education and the longer-term means of accomplishing those aims (which is sometimes termed 'strategy')."

Friedrich (quoted in Anderson J.E.: 1975)

"A proposed course of action of a person, group or government within a given environment providing obstacles and opportunities which the policy was proposed to utilise and overcome in an effort to reach a goal or realise an objective or a purpose."

J.E. Anderson (1975: 3)

"A purposive course of action followed by an actor or set of actors in dealing with a problem or matter of concern."

APPENDIX D continued

Anderson claims that this definition distinguishes a policy from a decision.

A.J. Dubrin (1974)

"Policy dictates what to do in a given situation, not how to do it."

C.E. Lindblom (1965)

does not actually define policy but identifies the main facets of the formation of policy as:

(i) Recognition of a problem.
(ii) Clarification of goals, values or objectives which must then be ranked and organized.
(iii) Listing of all possible ways of achieving goals.
(iv) Investigation of alternative consequences.
(v) Comparison of consequences with goals.
(vi) Selecting the policy.

APPENDIX E: THE TEST QUESTIONNAIRE

COVER

UNIVERSITY OF BATH, SCHOOL OF EDUCATION

TEACHER AND SCHOOL RELATED ISSUES

A QUESTIONNAIRE FOR TEACHERS

APPENDIX E: THE TEST QUESTIONNAIRE

LETTER

University of Bath

Claverton Down
Bath BA2 7AY

School of Education

Telephone Bath 6941
(STD code 0225)

Professor K Austwick
Professor W H Dowdeswell

You are kindly participating in a study which examines the policy-making procedures in sixteen comprehensive schools, eight in England, and eight in Western Australia.

As schools are becoming more complex, the traditional roles of teachers are changing. This questionnaire is to investigate certain aspects of the part now being played by teachers and to gauge their attitudes towards their present circumstances.

All responses will remain confidential and even in the final report will not be identified by person or school: individual opinions will not be revealed to other members of your staff at any level. You are asked to answer honestly and frankly bearing in mind that there is no right or wrong answer, it is your opinion being sought.

The wording and format of the questions may in some cases cause surprise. Key parts of the questionnaire are from standardized instruments designed for use in North America (where so much more investigation of this nature has been carried out) and the original instruments may not be amended without an effect upon their validity.

As a teacher with over twenty five years experience, the researcher is very conscious of the limited time available to you. He has kept this questionnaire as short as possible and the requested information is essential to the conduct of this study.

The Education Department of Western Australia has, in part, sponsored this research.

Please answer *EACH* and *EVERY* question and then seal your answers in the envelope provided.

Thank you for your time and effort.

J. A. Bunday

J. A. BUNDAY,
Research Student

APPENDIX E: THE TEST QUESTIONNAIRE

PAGE 1

PERSONAL DATA

Name of School _____

Tick as appropriate : answer all sections

1. Sex
   - Male ☐
   - Female ☐

2. Marital Status
   - Married ☐
   - Single ☐
   - Other ☐

3. Age
   - under 25 ☐
   - 25-29 ☐
   - 30-39 ☐
   - 40-49 ☐
   - 50-59 ☐
   - over 59 ☐

4. Experience (number of full years teaching including this year as one)
   - one ☐
   - two ☐
   - 3-5 ☐
   - 6-10 ☐
   - 11-20 ☐
   - 20-30 ☐
   - over 30 ☐

5. Status
   - Top Management: Head ☐ Deputy ☐
   - Middle Management (Head of Department or with special responsibilities) ☐
   - Classroom teacher ☐

6. Number of full time yearsat present school
   - one ☐
   - two ☐
   - 3-5 ☐
   - 6-10 ☐
   - 11-20 ☐
   - over 20 ☐

7. Subject Area (main subject only)
   - Humanities (English, Languages, Human Relationships, RE) ☐
   - Social Sciences ☐
   - Natural Sciences ☐
   - Mathematics ☐
   - Technological Subjects ☐
   - Physical Education ☐
   - Fine Arts (Music, Art, etc.) ☐
   - Home Economics ☐
   - Commerce ☐
   - Special Education ☐
   - Not now involved in class teaching ☐
   - Other (specify)..... ☐

8. Qualifications (Tick each qualification completed)
   - Teacher's Certificate ☐
   - Undergraduate Diploma ☐
   - Bachelor's Degree ☐
   - Bachelor's Degree with Honours ☐
   - Postgraduate Diploma ☐
   - Second Bachelor's Degree ☐
   - Third Bachelor's Degree ☐
   - Master's Degree ☐
   - Doctoral Degree ☐
   - Other (specify)..... ☐

9. An Opinion

Many decisions must be made regularly in any school. As far as your involvement in helping to shape school policies is concerned, do you feel that you are involved:

- Very much more than you want to be ☐
- More than you want to be ☐
- About as much as you want to be ☐
- Less than you would like to be ☐
- Very much less than you would like to be ☐

Tick *ONE* only

please turn over/...

APPENDIX E: THE TEST QUESTIONNAIRE

PAGE 2

PERSONAL SATISFACTION

Below are thirteen statements pertaining to characteristics or qualities connected with your teaching position. For each characteristic you will be asked to give <u>two</u> ratings:

i) How much of the characteristic is there currently connected with your teaching position?

ii) How much of the characteristic do you think there should be connected with your teaching position?

The scale of responses ranges from 'none' on the extreme left to 'very much' on the extreme right.

1. The feeling of security in my teaching position.
   - i) how much is there now — none ☐☐☐☐☐☐☐ very much
   - ii) how much should there be? — none ☐☐☐☐☐☐☐ very much

2. The feeling of self esteem a person gets from being in my teaching position.
   - i) how much is there now? — none ☐☐☐☐☐☐☐ very much
   - ii) how much should there be? — none ☐☐☐☐☐☐☐ very much

3. The professional authority connected with my teaching position.
   - i) how much is there now? — none ☐☐☐☐☐☐☐ very much
   - ii) how much should there be? — none ☐☐☐☐☐☐☐ very much

4. The opportunity in my teaching position for participation in the determination of classroom methods and procedures.
   - i) how much is there now? — none ☐☐☐☐☐☐☐ very much
   - ii) how much should there be? — none ☐☐☐☐☐☐☐ very much

5. The opportunity in my teaching position to give help to other people.
   - i) how much is there now? — none ☐☐☐☐☐☐☐ very much
   - ii) how much should there be? — none ☐☐☐☐☐☐☐ very much

6. The feeling of prestige fellow teachers have for my teaching position.
   - i) how much is there now? — none ☐☐☐☐☐☐☐ very much
   - ii) how much should there be? — none ☐☐☐☐☐☐☐ very much

7. The opportunity for independent thought and action in my teaching position.
   - i) how much is there now? — none ☐☐☐☐☐☐☐ very much
   - ii) how much should there be? — none ☐☐☐☐☐☐☐ very much

APPENDIX E: THE TEST QUESTIONNAIRE

PAGE 3

8. The opportunity for professional growth and development in my teaching position.

   i) how much is there now? none ☐☐☐☐☐☐☐ very much

   ii) how much should there be? none ☐☐☐☐☐☐☐ very much

9. The opportunity within the school to develop close relationships with fellow teachers.

   i) how much is there now? none ☐☐☐☐☐☐☐ very much

   ii) how much should there be? none ☐☐☐☐☐☐☐ very much

10. The prestige of my teaching position held by people in the community.

   i) how much is there now? none ☐☐☐☐☐☐☐ very much

   ii) how much should there be? none ☐☐☐☐☐☐☐ very much

11. The opportunity in my teaching position for participation in setting schools goals.

   i) how much is there now? none ☐☐☐☐☐☐☐ very much

   ii) how much should there be? none ☐☐☐☐☐☐☐ very much

12. The feeling of self fulfilment a person gets from being in my teaching position.

   i) how much is there now? none ☐☐☐☐☐☐☐ very much

   ii) how much should there be? none ☐☐☐☐☐☐☐ very much

13. The feeling of worthwhile accomplishment in my school position.

   i) how much is there now? none ☐☐☐☐☐☐☐ very much

   ii) how much should there be? none ☐☐☐☐☐☐☐ very much

please turn over/...

APPENDIX E: THE TEST QUESTIONNAIRE

PAGE 4

4.

PERSONAL ORIENTATION

The following statements concern your attitude towards professional and school related issues. Please indicate your response to each item by placing a tick in the appropriate box. There are five choices.

Strongly agree

Agree

Undecided

Disagree

Strongly disagree

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	It should be permissible for a teacher to violate a rule if the best interests of the pupils will be served in so doing.					
2.	Unless they are satisfied that it is best for the pupils, teachers should not do what they are told to do.					
3.	Good teachers should not do anything that they believe may jeopardizie the interests of pupils, regardless of who tells them, or what the rules state.					
4.	Teachers should try to live up to what they think are the standards of their profession even if the administrators or the community do not seem to respect them.					
5.	One primary criterion of a good school should be the degree of respect it commands from other teachers.					
6.	Teachers should try to put their standards into practice even if the rules of procedures of the school prohibit it.					
7.	Teachers should subscribe to and diligently read the standard professional journals.					
8.	Teachers should be active members of at least one professional teaching organisation and attend most conferences and meetings of the association.					
9.	Teachers should consistently practice their ideas of the best educational practices even if the administration prefers other views.					
10.	A teacher's skill should be primarily based on acquaintance with subject matter.					
11.	Teachers should be evaluated primarily on the basis of their knowledge of the subject to be taught, and their ability to communicate it.					
12.	Schools should not employ teachers unless they hold at least a first degree, or its equivalent.					
13.	If there were a teacher shortage, if should be permissible to employ teachers who do not possess the full teaching qualifications.					
14.	A teacher should be able to make his own decisions about problems that come up in the classroom.					
15.	Small matters should not have to be referred to someone higher up for a final answer.					
16.	The ultimate authority over the major educational decisions should be exercised by professional teachers.					

APPENDIX E: THE TEST QUESTIONNAIRE

PAGE 5

PERSONAL PARTICIPATION

Below are twelve situations requiring decisions within the school. For each situation you are asked to indicate whether you never, sometimes, often or always:

a) do participate in the decisions that are made.

b) wish to participate in the decisions that are made.

Please answer ALL questions by ticking one box in each major column (i.e. two responses for each question) as indicated by the sample question in which the respondent feels he always participates and feels he always should.

DECISIONAL SITUATIONS	Do you participate in this decision?				Do you wish to participate in this decision?			
	never	some times	often	always	never	some times	often	always
Example								
Establishing classroom instructional policies				✔				✓
1. Determining which pupils go into what classes								
2. Selecting the range of subjects to be offered in the school								
3, Determining pupil assessment procedures								
4. Planning the school budget								
5. Establishing or revising the school rules								
6. Allocating supplies and teaching resources								
7. Planning the timetable								
8. Determining the policy for internal staff training								
9. Allocating staff teaching duties								
10. Selecting staff for committees and other special duties								
11. Determining the allocation of classrooms								
12. Dealing with parent grievances								

APPENDIX F: A LIST OF DECISION ITEMS IDENTIFIED IN SIX RESEARCH INSTRUMENTS

		BELASCO ET AL	EYE ET AL	WENDLANDT	PAPPENROTH	MAWTER	BONNETTE
1	Curriculum matters	*	*	*	*	*	*
2	Class arrangements		*		*	*	
3	Classroom usage		*		*		
4	New staff orientation		*				
5	Committee (staff) appointments		*			*	
6	Building design and planning	*	*		*		*
7	Purchase and allocation of teaching aids		*	*	*		
8	Information to community on curriculum		*				
9	Content and form of pupil records		*	*	*	*	*
10	Selection of teachers for innovative programmes		*			*	
11	Pupil reports		*	*		*	
12	Promotion of pupils		*		*	*	
13	Teacher assessment		*	*		*	*
14	Regulations concerning lesson plans		*		*		
15	Participation in community activites		*				
16	School rules	*	*			*	*
17	Textbook selection	*	*	*	*	*	
18	Procedures for obtaining instructional supplies		*				
19	Evaluation of the curriculum		*				*
20	In-service activities for staff		*		*	*	*
21	Homework practices		*				
22	Assignment of staff duties	*	*	*	*		*
23	School budget formulation	*	*		*		*
24	Public relations announcements to the community		*				
25	Use of parent committees		*				*
26	Courses to be taken for promotion				*		
27	Capital expenditure				*		
28	Tasks of teacher aides				*		
29	Teacher selection	*		*	*		*
30	Outsiders permitted in school				*		
31	Field trips				*		
32	Student assessment procedures	*			*	*	*
33	Staff grooming				*		
34	Meeting agenda				*		
35	Staff emergency leave				*		
36	Innovative practices	*		*	*		
37	Class size				*		
38	Use of 'unassigned'time				*		
39	Extra duties			*	*		*
40	Length of school day			*			
41	School calendar			*			
42	Student grooming			*			
43	Selection of principals and other staff		*				*
44	Teacher dismissal			*			*
45	Courses offered			*			*
46	Salaries	*		*			*
47	Goals and objectives						*
48	Determination of teaching load						
49	Promotion						*
50	Suspension or expulsion of pupils						*
51	Responding to parent grievances						*
52	Resolving faculty grievances						*

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL
POLICY AREA 1: CURRICULUM

QUESTION	WHO PLAYS WHAT ROLE IN MONITORING AND REVIEWING THE OVERALL SCHOOL CURRICULUM?	WHO PLAYS WHAT ROLE IN DETERMINING INDIVIDUAL SUBJECT CONTENT?
SCHOOL		
1	The had decides but teachers feel they get a fair say	Department head decides but teachers get a fair say in adjusting syllabus materials
2	Teachers have considerable influence and are well satisfied to contribute even though head has ultimate control	External exam syllabuses obviously important but staff feel they make input under guidance of senior department teacher
3	Head has final say but teachers feel they make considerable input and head does not dominate	Within the confines of externally prescribed syllabus, department heads decide in consultation with staff
4	In curriculum the role of the head is paramount but he does not really initiate, only exercises veto when he wishes. Curriculum committee is most important	Department head decides, generally in consultation. External syllabuses for exams obviously dictate to some extent
5	Head decides but staff agree there is good and frequent interaction and he takes advice	Staff heavily involved in syllabus. Where exam determines, staff exercise some selection controls
6	Head has an advisory committee dominated by one deputy but head makes final decision	Syllabuses are strongly influenced by external examination boards but department decides under guidance of senior teacher
7	In this large institution head has final say but does not dominate. There is a Board of Studies with an executive director who has specific role of curriculum control. Student demand important	Examination board syllabuses dominate the content but teachers feel selection of material very much in their hands
8	Head makes final decisions but he consults widely	Syllabus handled in various departments, usually under domination of department head. Staff satisfied, particularly in view of exam board rulings
9	Staff feel principal has final say but they have been influential in determining	Syllabus matters firmly in hands of teachers but within boundaries laid down by examining bodies
10	Principal plays a dominating but not a lone role. Staff advice is sought and taken	External syllabuses important. Within constraints, staff substantially responsible for selection of material presented

continued

APPENDIX G: POLICY AREA 1: CURRICULUM (continued)

SCHOOL		
11	Curriculum determination largely in the hands of teachers	Syllabus determination largely in the hands of teachers within externally imposed boundaries
12	Principal ultimately responsible but strongly influenced by outside and inside factors	Teachers well in charge of the syllabus within confines of externally imposed restrictions
13	New subjects may be suggested by any teacher. Principal decides after consultation. Student demand and the staffing formula are the real determinants	Senior teachers decide on syllabus with minimal direction from principal. External restrictions help to determine
14	Staff determines the curriculum with principal exercising veto	Senior teachers play leading role in determining syllabus content but within external guidelines
15	Ultimate control in the hands of the principal but staff feel he consults widely	Syllabus matters decided by teachers in consultation
16	Teachers collectively decide on curriculum with little evidence of pressure from the principal	Syllabus partly determined by outside agencies but staff exercise control over the selection of material taught

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL
POLICY AREA 2: ASSESSMENT

QUESTION	WHO PLAYS WHAT ROLE IN DETERMINING STUDENT ASSESSMENT PROCEDURES?	WHAT PROVISION IS MADE FOR REVIEW AND POSSIBLE CHANGE TO THE SYSTEM?
SCHOOL		
1	The Director of Studies negotiates with subject departments for a standardised scheme. Departments seen as being reasonably autonomous	Widespread discussion does occur. Any staff member could motivate change which would be extensively discussed before being effected.
2	Teachers feel they control assessment with widespread discussion though deputies eventually lay down procedures	Any member of staff can initiate change in this area. New proposals are subject to intense scrutiny before any change is made
3	Teachers mainly responsible for assessment procedures with head responsible to see that standardisation occurs	Change would be difficult. Senior staff committee would decide review and possible change
4	There is agreement that teachers control procedures used but staff see head as controlling the system whereas head sees this role in the hands of the curriculum committee	Change would be difficult because of inter-departmental rivalry. Curriculum committee would recommend change to the head
5	Head plays a defining and leadership role but assessments within defined limits in the hands of the staff	Anyone could initiate a proposal for change and widespread discussion would result before senior staff approval
6	Procedures considered traditional although subject teacher basically controls assessment within prescribed limits	Change almost impossible, teachers feel. (Head also reluctant). The administrative and academic committees would advise on potential change
7	Assessment procedures regarded as traditional. Board of Studies reviews annually and controls but teachers assessments are accepted	Although there is constant discussion and interaction on this topic, change is difficult and has never occurred. Teachers not unhappy because they know where they stand
8	Individual teachers are autonomous within a system regarded as traditional. Head is seen as being in control although he claims to have adopted system	Staff discussion is seen as influencing what the head decides. They feel head would initiate change and approaches would be to him
9	Admin. teachers see the staff as influential; teachers aver that Admin. decides. Hard to tell who controls or decides. Final decision seen as resting with the principal	Staff meeting makes recommendation after topic widely considered by subject department meetings. Principal decides
10	Although procedures are laid down in a staff brochure, staff feel senior teachers are most influential. Procedures controlled by class teachers	Senior teachers influence the principal for any change in system. Individual teachers feel impotent to initiate change. Principal says he would take advice

continued

APPENDIX G: POLICY AREA 2: ASSESSMENT (continued)

SCHOOL		
11	The senior staff meeting decides but individual staff have considerable influence and certainly determine assessments at the subject level. Comparability is an issue	Anyone can initiate a proposed change but senior staff meeting would decide
12	Staff agree that they decide at all of staff meetings and principal agrees. Senior teachers dominate this area. Individual teachers control assessments	Proposals for change would be floated at staff meeting. Senior staff would consider staff recommendation and go back to them with their findings
13	Senior staff, particularly senior teachers, seen as holding dominating control even though staff have some say	Suggestions for change may come from any level but decision would be made at senior staff meeting
14	Assessment procedures seen as largely in the hands of staff with senior teachers influencing by leadership. Head not seen as anything more than arbitrator	Change would be on the recommendation of staff or subject department. Widespread discussion would occur
15	The principal controls the final decision but there is frequent staff discussion and influence	Change may be initiated by principal or staff but the principal would exercise ultimate responsibility
16	Every teacher interviewed thought he/she had some influence over this area. Principal claims only to exercise leadership	Change may be initiated from any level. There would be widespread discussion before a decision was taken

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL POLICY AREA 3: WELFARE

QUESTION	WHO PLAYS WHAT ROLE IN THE PROGRAMME DESIGNED TO CATER FOR THE WELFARE OF EACH INDIVIDUAL CHILD?	HOW WAS THIS PROGRAMME DECIDED?
SCHOOL		
1	The tutor has first responsibility since he is involved at the point of contact. Referrals are made up through the hierarchy	The system has been in operation so long that it is regarded as traditional. The steering committee decides on such policies
2	The House head is expected to take initiative but the tutor is the main link with the child. Various specialist staff involved in specific welfare roles	Traditional. In this school the welfare role is dominant and respected by most. In the memory of those interviewed only one attempt to change the system had been overwhelmed by the majority
3	The tutor works through the heads of lower, middle and upper school. Problems are passed on to appropriate specialists	Traditional. No one interviewed could recall a time it did not operate. Change unlikely
4	The housemaster and mistress play the leading roles and teachers refer problems to them. Specialist welfare role teachers take over problem cases	The head has had long tenure and dominated early decisions. Devolution of authority has occurred and house heads feel they could recommend change but do not wish to
5	The group tutor is the contact point and referrals are through the hierarchy	The head was foundation head and exercised considerable leadership which staff acknowledge as being very concerned with individual welfare. Teachers regard the approach as traditional
6	Tutors and class teachers refer specific matters to the Year head. Important cases are referred to specialist staff	The decisions occurred when an amalgamation took place, when it was necessary to find jobs for all senior teachers from the secondary modern and grammar schools involved.
7	Tutors are responsible to the Year head and all interviewed staff saw themselves as involved. Counselling services are prominent and the principal is particularly interested	The system 'evolved' amd was ratified by acceptance. Welfare provision regarded as traditional in English schools
8	Tutors take the initiative and house masters are responsible. The deputy head takes a leading role and specialist welfare staff are involved	The biggest decision was taken by the County when the school was purpose-built with separate "Houses". School has tried to make this system work

continued

APPENDIX G: POLICY AREA 3: WELFARE (continued)

SCHOOL		
9	Programme tends to be 'ad hoc'. Staff refer students to whichever specialist seems appropriate, for example, Youth Education Officer, Guidance Officer, Nurse. No formal structure apparent	The general staff meeting decided on the programme, according to the Principal. Staff do not really agree; see principal as dominating
10	Teacher must take the initiative referring students to specialist staff. Clearly defined welfare structure with deputy head playing the leading role	Staff doubt whether it was actually decided. Very much in the hands of the individual teacher within the framework of a fairly academic tradition
11	Year masters implement decisions and deputy principal (female) plays a co-ordinating role. Individual staff at point of contact must take initiative	Regarded as 'ad hoc' arrangement although Staff Council would decide. No clearcut school policy.
12	Welfare begins with class teacher at point of contact, then referred through various specialists. A formal House system operates and staff enthusiastic	Principal credited with leading staff into accepting a formal system but there was widespread staff acceptance and welfare roles are prominent
13	Generally agreed the programme is 'ad hoc'. Class teachers expected to use initiative. Extensive use of specialists. Principal provides leadership	Staff have resisted attempts to formalise the programme. Agreed that principal would have to initiate but he would need support
14	A formal vertical system operates but staff question degree of commitment. Principal initiates most action and staff expected to deal with problems. Specialists used extensively	Staff agreed at a meeting and change would have to be agreed in same way. There is resistance to further staff involvement
15	Various staff, for example, Guidance Officer, Youth Education Officer, Nurse, play a formal role. Referrals are the main input. Principal feels particular responsibility but staff resistance	Committee at work to find an acceptable formal programme. Principal is initiator but there is staff resistance
16	Well covered in the strategy of sub-schools. Sub-school teachers initiate and regular welfare meetings discuss cases. Referrals are to specialists	Each sub-school decided and there is evidence of formalisation and care. Change would occur if staff dis-demonstrated dissatisfaction

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL POLICY AREA 4: ORGANIZATIONAL STRUCTURE

QUESTION SCHOOL	HOW WAS THE GROUPING OF CLASSES DECIDED?	HOW ARE THE NUMBER AND TYPES OF STAFF MEETINGS DETERMINED?
1	Banding policy inherited. Head would like to modify but staff generally support it. Some staff dissension about virtues of mixed ability classes	Head decides this and also the agenda. Staff see "Big 3" dominant in staff meetings
2	General agreement that although head decides, staff widely consulted before changes are made	Regularly timetabled. Staff contribute to agenda items. Many committees
3	Regarded as traditional. Staff agree that new head has not dominated. No dissatisfaction with what is regarded as a compromise arrangement	Staff meetings timetabled. Staff feel they play a major role in determining the agenda.
4	Head decided. Before doing so, he himself taught a mixed ability class to show that it could succeed	Head initiates most meetings and controls the agenda. Many committees operate
5	Foundation staff decided on mixed ability and this has remained policy, Leadership of head very obvious	Head expects many meetings of involved staff. A generally favourable response. Many committees
6	Head decided on policy of banding but there is widespread support. Decision taken at the time of amalgamation	Meetings are the head's responsibility. Large and small meetings are prescribed.
7	Streaming considered traditional. Considerable discussion but no decision to change. Many higher classes decided by student choice	Because of the committee system, many meetings of small groups. Whole staff meetings rare on account of large number of part-time staff. Head lays down a programme
8	Staff pressure has led to some modification to existing mixed ability classes. Head happy for staff to negotiate on this	Head decides on number and types of meetings and promotes them. Other senior staff promote and conduct sectional meetings. Head, although dominant, is susceptible to pressure and will modify procedures
9	Because of cross setting, senior teachers and staff determine student placement. Head appears to have little influence over this	Administrative staff have initiated a regular programme of meetings and dominate in planning them

continued

APPENDIX G: POLICY AREA 4: ORGANIZATIONAL STRUCTURE (continued)

SCHOOL		
10	Streaming, which the head supports, is traditional but cross setting of subjects allows for some variations on this theme	Principal decides and dominates staff meetings. Many staff feel they are told what to do and there is little opportunity to decide. Head says he is strongly influenced by staff opinion
11	Principal and deputies decide on class placement policy although cross setting gives teachers some discretion. Most interviewed staff feel someone else has decided	Dominated by senior staff both as to timing of meetings and agenda. Staff feel they have little say
12	Allocation of students to classes is decided by staff meetings. Staff feel deeply involved in this	Principal and senior staff decide but staff feel happy that they can provide input that may influence
13	Student placement is decided by subject departments (staff). Classes are cross set to make this possible	Staff have called meetings but generally principal decides on a regular meeting time. Principal seen to be a good listener and staff feel influential
14	Principal decided on random groups for Year 8. All other years decided by subject teachers or student choice	Traditionally meetings are timetabled, both whole of staff and departmental, and staff feel that opinions can be aired. Agenda contributed by staff as well as principal
15	Class groupings decided by subject teachers. This is made possible by a cross set timetable	Staff committee plans meetings on a regular basis. Staff feel some autonomy and that principal is influenced
16	Parents and students have a choice of sub-schools and classes selected randomly in mixed ability. Teachers influence class placement primarily	Teachers decide on sub-school meetings. Principal lays down a framework for meetings but is only a member at same. He has many sub-committees and staff feel they have ample opportunity to influence

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL POLICY AREA 5: TIMETABLE

QUESTION	HOW WAS THE DISTRIBUTION OF SCHOOL TIME DETERMINED, BOTH FOR THE TIMETABLE AND THE YEARLY PROGRAMME?	HOW WERE STAFF TEACHING TASKS DETERMINED?
SCHOOL		
1	Allocation of time seen as traditional: dominated by steering committee and ratified by head. Attempts to change the arrangements fail because of lack of support	Subject senior requests staff allocation and the timetabler attempts to meet these requirements but may amend
2	Although regarded as traditional, possible change currently under investigation by a wisely representative working party. Head would ratify proposals	Each department requests who teaches what and individuals are consulted and can influence the timetable
3	Staff pressure changed existing format from a block timetable of four periods to an eight period day. Widely felt that one deputy dominates timetable decisions	Subject head recommends and teaching loads generally allocated by timetabling deputy as suggested
4	Traditional allocations have never been seriously challended because of interdepartmental rivalries. Head seen to dominate. No pressure for change	Senior effectively allocates staff and timetabling deputy accepts as far as possible
5	Head plays a leading role but consensus is that staff pressure affects time allocations and head acts after consultation	Executive committee plays a leading role; loads allocated by head only after negotiation and consultation have taken place
6	Timetable is traditional and unchanged since amalgamation. There is little pressure for change	Department heads allocate teaching loads and this is subject to subsequent negotiation
7	For ten years, a ten-day, six period cycle has operated. Any changes likely to occur will come about as a result of staff pressure	Department heads allocate teaching loads
8	A recent decision to change to a four period day still fresh in everyone's mind. Although deputy seen as most influential promoter the curriculum committee put the case and it was accepted by head and staff	The department head allocates teaching assignments

continued

APPENDIX G: POLICY AREA 5 : TIMETABLE (continued)

SCHOOL		
9	Traditional timetable operates and no pressure to change. Head would play leading role	Senior teachers allocate teaching loads. Deputy principal, as timetabler is dominant in negotiations
10	Although timetable regarded as traditional, principal seen as dominant. A recent decision to vary the day to introduce a compulsory innovation seen as his decision also	Senior teachers advise but allocations seen as ultimately in hands of the principal
11	Timetabling decisions regarded as administrative rather than co-operative. Deputy principal, as timetabler, particularly strong	Senior teachers advise but final decisions in the hands of the deputy
12	Staff have been consulted on timetabling arrangements but they act within parameters defined by administrative staff	Senior teachers highly influential in the deposition of teachers to classes
13	Despite traditional arrangement intermediate staff have been heavily involved and influential. Lower rank teachers feel they have no say	Senior teachers play the biggest role
14	Staff have discussed variations to the eight period day and rejected it. Principal decided unilaterally on a daily form period	Senior staff influence teaching allocations. Interviewed lower level staff see a 'pecking order', with newcomers given the least desirable classes
15	No change in the traditional day has been sought	All senior staff, particularly subject seniors, decide. Teacher level staff feel they have no say. Head has decided that all senior teachers must take at least one lower school class
16	Eight period day maintained after extensive discussion in which all felt involved	Sub-school heads negotiate with deputy, who timetables, and principal arbitrates if necessary. Staff feel widely consulted. Clearly, timetabling is a complex consultative exercise

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL
POLICY AREA 6: ETHOS

QUESTION	WHO DECIDED ON THE SCHOOL RULES? HOW ARE THEY REVIEWED?	WHO DECIDES ON SUCH MATTERS AS STANDARDS OF DRESS AND BEHAVIOUR?
SCHOOL		
1	There are no written rules and few hard and fast policy decisions about school values	Tradition plays important part but the values of individual teachers seen as most important
2	Staff parents and students widely involved in discussion. Head leads but does not dominate	Widespread discussion. Everyone aware of head's leadership but teachers feel well involved
3	This old grammar school adopted old rules and modified them slightly by staff discussion, etcetera. Head does not dominate	Traditional plays the biggest role but senior staff committee discusses such matters frequently
4	Head decided originally and School Council modifies	Tradition plays main part, with hierarchy more involved than class teachers
5	Head plays a strong leadership role as he believes in values and ideals. Rules are not written but have evolved	There is an expectation that the basic tenets of dress and behaviour will be upheld. Very much the Head's area
6	Staff say rules are unwritten but head insists they exist. Head certainly dominates	A conservative, traditional approach. There is a discipline committee and matters of discipline are frequently discussed
7	Tradition plays the biggest single role, although head and deputies play leading part	Staff interact. Strong community pressure for a uniform: kept one going. Behaviour controlled hierarchically
8	Head decides on school rules after advice. House heads the chief catalysts for change	Head dominates area of dress and behaviour but he needs staff and parent support. This semi-rural area fairly conservative
9	Rules are traditional and principal seen as dominant in this area, even although staff meeting decides	Behaviour subject of constant staff discussion and review. Hierarchical treatment of misbehaviour. Uniform cannot be enforced
10	Despite attempts to modify rules, they have endures for "at least twenty years". Principal fosters tradition	Principal and deputy principal (female) maintained strict standards of dress and behaviour. High standards sought in all thing
11	School rules decided by staff and student committee. Principal and deputies play leading role	Principal and deputies dominate with strong participation from other senior staff

continued

APPENDIX G: POLICY AREA 6: ETHOS (continued)

SCHOOL		
12	School rules are unwritten and traditional, under constant review by both staff and students. All are invited to contribute	Staff influence is obvious. Head consults widely, although is seen as leading substantially in the area
13	Essential rules devised by the principal after consultation with staff. Latter see principal as dominating	Principal leads but teachers and students determine the value system. There is an ambivalent attitude rather than a fixed school policy
14	Rules review annually by senior staff but very few changes have been made. Staff have opportunity to influence	Although senior staff dominate, the feeling is that the teachers generally set the tone because positive leadership felt to be lacking
15	A staff committee conducting a review at the time of the visit. Staff contribute widely but there is an ambivalent attitude towards the rules	Principal seen as dominating and staff as supportive of efforts to maintain standards. Ethos of this school very much determined by its community
16	No rules as such. School aims for civilised behaviour and a no tension climate. Sub-schools and teachers vary as to expectations	No formality to these matters and adult behaviour patterns set by teachers. Standards of cleanliness and decency are important

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL POLICY AREA 7: SCHOOL RESOURCES

QUESTION	HOW IS IT DECIDED TO SPEND DISCRETIONARY FUNDS?	HOW ARE DECISIONS ABOUT WHO USES WHAT ROOMS MADE?
SCHOOL		
1	Departments submit estimates and head makes the allocations. A good deal of negotiation occurs	The fact that rooms are subject orientated helps decide. Timetabler allocates and staff may negotiate
2	The head controls capitation funds and distributes them in proportion to reasonable requests. Voluntary funds distributed by a steering committee of staff and head does not participate	Rooms traditionally belong to various departments. This is not an issue
3	The head controls the allocation of finances. Staff indicate needs and the money is divided	Rooms allocated by timetable according to a traditional pattern
4	There is a finance committee but the head skims his share off first and there is no discussion about this	The timetablers dominate room allocations and heads of department negotiate. There is considerable competition for storage space
5	Head deducts caretaking needs and remaining funds widely discussed. Every teacher who wants to be is involved in a finance committee	Room allocations primarily determined by the purpose-built nature of the school. There is room for negotiation
6	The head controls allocation of funds and staff have little say	The timetable and the nature of the building determine room allocations
7	Money is distributed according to a complicated formula involving student hours plus a weighting for the subject. Staff see this as a very fair arrangement	Rooms are traditionally allocated to teaching departments which sub-allocate them. No problems
8	It is agreed by all that the head allocates all money. No apparent dissention since staff seem to get what they want	Rooms are assigned by the timetabler in terms of traditional roles
9	A budget is prepared by a finance committee. Expenditure is in the hands of departments	Deputy principal, as timetabler, allocates room but there are no difficulties

continued

APPENDIX G: POLICY AREA 7: SCHOOL RESOURCES (continued)

SCHOOL		
10	Staff see principal as keeping a tight rein on resources. Principal says he consults widely	Room allocations present no difficulty and are decided by the specialist nature of the rooms
11	Staff see principal as controlling funds. He claims to allocate according to a formula	This is a "faculty" school and rooms are purpose-built for subject teaching. No difficulty in room allocation
12	The finance committee decides and teachers have considerable say in money allocations. A parent is a member of finance committee	Deputy principal, as timetabler, decides room allocation
13	Departments run their own budgets provides they are within guidelines determined by the head	Room allocations made by timetabling deputy
14	Principal seen as dominating despite the presence of a finance committee	Room allocations decided by the deputy principal without controversy
15	Department work out their own budgets and spend them independently. Well endowed school: no finance worries. A finance committee oversees	Rooms allocated according to subjects by timetabler. No fierce competition
16	Finances controlled by an elected finance committee. No shortage of resources	Sub-school heads control room allocations. No shortage of rooms

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL POLICY AREA 8: STAFF DEVELOPMENT

QUESTION	WHAT IS DONE ABOUT IN-SERVICE IN THE SCHOOL AND WHO IS INVOLVED?	WHAT PROVISION IS MADE FOR THE GUIDANCE OF A NEW TEACHER AND BY WHOM?
SCHOOL		
1	Two days allowed by County are used. Senior staff see themselves as making some effort but to junior staff this is not evident	'Ad hoc' arrangements only
2	Head conducts an annual review of each department. The working parties give impetus to staff development	The deputy head (Curriculum) has a specific responsibility for probationery teachers
3	No formal programme operates and it is very much in the hands of subject seniors. Professional development is largely self motivated	No formal programme
4	There is a senior staff tutor with specific responsibilities but lower level staff see little evidence of his efforts. Head tries to some extent	No special provisions are made
5	Head is fairly intensively engaged in staff development and his leadership in this area is recognised and respected	A formal programme involving head and key teachers operates for the beginning teacher
6	No clearcut policy. The matter is left very much to subject seniors	No special provisions are made
7	Although there is encouragement by the head, there are no formal programmes. Staff handbook is extensive	There is a formal programme for probationery teachers. Senior staff have specific responsibilities
8	Although head claims a consistent effort, staff see no evidence and no formal programme operates	No formal programme. Department heads may or may not make a special effort
9	Some formal programmes operate under the sponsorship of the principal but they gain little recognition from staff	A formal programme for new staff operates early in the year. Otherwise no programme
10	No evidence of staff professional development. It is largely up to the individual	Deputy head (female) and senior teachers have a formal brief to look after new teachers
11	No decisions about in-service. Very little evidence of any being done	Induction is left to senior staff

continued

APPENDIX G: POLICY AREA 8: STAFF DEVELOPMENT (continued)

SCHOOL		
12	Regular meetings of staff are the nearest approach to a professional development programme	No induction programme operates formally, although senior teachers seem aware of responsibilities
13	No formal policy in this area apart from what is covered in the policy booklet	No formal induction programme
14	No formal programme. Staff development is 'ad hoc'	No formal programme of staff induction
15	Only the regular staff meetings provide an internal avenue for professional development	Individual beginning teachers get some help from seniors but really require to have initiative
16	An appointed curriculum co-ordinator provides specific assistance and courses are arranged from time to time	Senior staff have a specific brief to provide induction training for beginning teachers

APPENDIX G: SUMMARY OF RESPONSES FROM 96 INTERVIEWS BY SCHOOL POLICY AREA 9: PUBLIC RELATIONS

QUESTION	DESCRIBE THE PUBLIC RELATIONS METHODS OF THE SCHOOL, STRESSING PARTICULARLY WHO IS INVOLVED	WHAT ROLE DO PARENTS PLAY IN THE SCHOOL?
SCHOOL		
1	Mainly the head but there is a press officer. Head very active and staff consider her successful	Although the head stresses parental involvement, staff see parents as having relatively little influence
2	This school, particularly head and deputies, works hard at public relations role. It strives to be a community school	Parents involved as much as seems possible. Seen by staff as tending to be passive
3	Public relations seen as 'ad hoc' but with head working at it consistently	Parents little involved. There seems mutual suspicion between parents and teachers
4	Many official efforts by the school, mainly emanating from the head	Very few parents support the PTA and they appear to have very little influence on the school
5	The head leads prominently in this small rural community. Significant effort	Parents quite closely related to the school but the general feeling is that influence is scant
6	The head is a public figure in this isolated, semi-industrial town and public relations for the school is his forte	Parents and the community do not play a significant role. Head is seen as educational leader
7	Teacher appointed as press officer sees to a weekly newspaper column. Head prominent. Staff query effectiveness of public relations	Parents do not influence school to any extent
8	Head assume the main responsibility to 'sell' the school and staff feel that he does this well	Most parents prefer not to be involved. School does make an effort to include them
9	Principal tries hard with regular newsletters, etcetera, but staff critical	Parents take very little part in the life of this school. Hard to get them involved
10	Regarded by all as the principal's domain and felt by staff to be well done	No effective parental involvement despite lip service being given to it
11	Principal makes most decisions about public relations and works hard at it	Some staff see principal as very responsive to parental opinion but this seems unlikely in the general sense

continued

APPENDIX G: POLICY AREA 9: PUBLIC RELATIONS (continued)

SCHOOL		
12	Public relations firmly in the hands of the principal. His main avenue is the monthly newsletter	Parents show interest and support in this rural community but have very little actual influence
13	Principal uses the media as extensively as possible. The Youth Education Officer is also seen as a public relations man	Parents seen as playing no role in the school
14	Public relations seen by staff as firmly in the hands of the principal. Staff doubt its effect	Parents seen as playing no part in influencing the policies of the school
15	This school takes an active part in promoting itself within the community. Head dominant but others influential	Teachers agree that the parent group, largely professional people, do influence the school. A formal School Council
16	Very big effort by principal and staff to maintain contact with the community	Parents are in the school a lot and do influence its operation

APPENDIX H: QUESTIONNAIRE RESPONSE RATES FOR VARIOUS SUB GROUPS

SUB GROUP	No. of Respondents	No. Possible	% Possible
All Respondents	759	1021	74.34
School 1	37	41	90.24
School 2	23	56	41.01
School 3	52	78	66.66
School 4	51	85	60.00
School 5	32	36	88.59
School 6	39	50	78.00
School 7	57	78	73.08
School 8	49	63	77.78
School 9	41	70	58.57
School 10	42	54	77.77
School 11	65	85	76.47
School 12	51	56	91.07
School 13	55	74	74.32
School 14	52	57	91.22
School 15	41	59	69.49
School 16	72	79	91.14
English Respondents	340	487	69.82
Western Australian Respondents	419	534	78.46
Urban School Respondents	74	141	52.48
Suburban School "	526	697	75.47
Rural School "	51	56	91.07
Sub Rural School "	108	127	85.04
Large School Respondents	688	944	72.88
Small School Respondents	69	77	89.61
Principals	16	16	100.00
Deputy Principals	28	33	84.85
Middle Management	307	361	85.04
Non Management Teachers	408	611	66.78

APPENDIX I: RELIABILITY CO-EFFICIENTS FOR TEST ITEMS (Utilising the Cronbach's Alpha Technique)

(i) Personal Needs Satisfaction Tests (based on Porter)

PSNOW (Perceived Personal Needs Satisfaction within the School

	Co-efficient of Reliability
Item 1	.87949
Item 2	.86202
Item 3	.86521
Item 4	.87870
Item 5	.86955
Item 6	.86677
Item 7	.86958
Item 8	.86697
Item 9	.87606
Item 10	.86931
Item 11	.86808
Item 12	.86036
Item 13	.86087

Overall Reliability Co-efficients : 13 items
Alpha = .87771 Standardised Item Alpha .87816

PSSHOULD (Ideal Personal Needs Satisfaction within the School

	Co-efficient of Reliability
Item 1	.84445
Item 2	.83303
Item 3	.83802
Item 4	.84683
Item 5	.83915
Item 6	.84009
Item 7	.84458
Item 8	.83716
Item 9	.83953
Item 10	.83587
Item 11	.83453
Item 12	.83474
Item 13	.83592

Overall Reliability Co-efficients : 13 items
Alpha = .84937 Standardised Item Alpha .85216

APPENDIX I (continued)

(ii) Professionalism Test (Corwin)

PSOTOT (Professional Role Orientation Scale)

	Co-efficient of Reliability
Item 1	.60848
Item 2	.58141
Item 3	.58946
Item 4	.60170
Item 5	.60678
Item 6	.58948
Item 7	.59783
Item 8	.61657
Item 9	.57945
Item 10	.62071
Item 11	.61094
Item 12	.61024
Item 13	.64990
Item 14	.60051
Item 15	.60945
Item 16	.60485

Overall Reliability Co-efficients : 16 items
Alpha = .62065 Standardised Item Alpha .63915

(iii) Degree of Participation Tests (based on Alutto-Belasco

PPDOPART (Perceived Participation in School Decisions)

	Co-efficient of Reliability
Item 1	.87404
Item 2	.85714
Item 3	.87100
Item 4	.86277
Item 5	.86137
Item 6	.86619
Item 7	.85536
Item 8	.86042
Item 9	.85753
Item 10	.87251
Item 11	.86202
Item 12	.87224

Overall Reliability Co-efficients : 12 items
Alpha =.87443 Standardised Item Alpha .87504

APPENDIX I (continued)

PPWISHTO (Desired Level of Participation in School Level Decisions)

	Co-efficient of Reliability
Item 1	.87854
Item 2	.86748
Item 3	.87181
Item 4	.86676
Item 5	.87033
Item 6	.86671
Item 7	.86547
Item 8	.86376
Item 9	.86324
Item 10	.86865
Item 11	.86806
Item 12	.87859

Overall Reliability Co-efficients : 12 items
Alpha = .87884 Standardised Item Alpha .87731

APPENDIX J: DATA ANALYSIS

J1: STATISTICAL DETAILS OF NEEDS SATISFACTION INDEX SCORES BY SCHOOL

SCHOOL GROUP	MEAN SCORE	STD. DEVIATION	VARIANCE	NUMBER
Total Sample	-17.2600	11.4382	130.8326	673
School 1	-15.7297	8.9245	79.6471	37
" 2	-16.8095	11.5569	133.5619	21
" 3	-18.2708	11.3038	127.7762	48
" 4	-17.0909	10.7699	115.9915	44
" 5	-11.4800	9.0052	81.0933	25
" 6	-20.6364	12.6066	158.9261	33
" 7	-15.5510	11.6280	135.2109	49
" 8	-17.3261	10.7374	115.2913	46
" 9	-20.0000	13.4292	180.3429	36
" 10	-19.6053	9.7358	94.7859	38
" 11	-18.3770	11.3036	127.7721	61
" 12	-18.7143	12.4362	155.3310	42
" 13	-20.2157	13.8395	191.5325	51
" 14	-17.7674	8.8502	78.3256	43
" 15	-16.5833	13.6996	187.6786	36
" 16	-12.0794	9.0559	82.0097	63

Analysis of Variance

	Sum of Squares	Degrees of Freedom	Mean Squared
Between Groups	4304.1031	(15)	286.9402
Within Groups	83615.3917	(657)	127.2685
Total	87919.4948	(672)	

F = 2.2546 p = .0043 ETA squared = .0490

APPENDIX J: DATA ANALYSIS

J2: STATISTICAL DETAILS OF PERCEIVED PERSONAL NEEDS SATISFACTION SCORES BY SCHOOL

SCHOOL GROUP	MEAN SCORE	STD. DEVIATION	VARIANCE	NUMBER
Total Sample	60.9100	13.1829	173.7891	711
School 1	58.6757	12.8435	164.7252	37
" 2	61.6818	14.0455	197.2749	22
" 3	56.5714	11.8163	139.6250	49
" 4	60.3830	12.4281	154.4588	47
" 5	64.9643	9.4261	88.8505	28
" 6	56.0278	14.6141	213.5706	36
" 7	61.3725	13.2604	175.8384	51
" 8	58.4583	13.1553	173.0621	48
" 9	59.6053	13.8027	190.5156	38
" 10	59.2821	12.2881	150.9973	39
" 11	60.8413	12.5572	157.6841	63
" 12	61.2609	11.7008	136.9082	46
" 13	58.5094	15.5719	242.4855	53
" 14	61.0833	11.5442	133.2695	48
" 15	63.8684	14.8017	219.0903	38
" 16	69.2500	11.4036	130.0410	68

Analysis of Variance

Sum of Squares		Degrees of Freedom	Mean Squared
Between Groups	8294.2144	(15)	552.9476
Within Groups	115E + 06	(695)	165.6058
Total	123E + 06	(710)	

F = 3.3389 p = .0000 ETA squared = .0672

APPENDIX J: DATA ANALYSIS

J3: STATISTICAL DETAILS OF PROFESSIONAL ROLE ORIENTATION SCALE SCORES BY SCHOOL

SCHOOL GROUP	MEAN SCORE	STD. DEVIATION	VARIANCE	NUMBER
Total Sample	40.2077	6.3181	39.9180	698
School 1	43.1471	4.8998	24.0080	34
" 2	41.3913	6.3155	39.8854	23
" 3	41.5102	5.4126	29.2968	49
" 4	41.7778	5.9539	35.4495	45
" 5	43.1724	5.2035	27.0764	29
" 6	40.2105	5.2358	27.4139	38
" 7	39.0189	6.1221	37.4804	53
" 8	41.3043	7.2384	52.3942	46
" 9	41.4444	5.8135	33.7968	36
" 10	39.8462	5.1429	26.4494	39
" 11	38.1967	5.6769	32.2273	61
" 12	41.7800	6.4216	41.2363	50
" 13	40.3922	6.0863	37.0431	51
" 14	40.1915	7.0020	49.0278	47
" 15	36.0606	6.4223	41.2462	33
" 16	37.1875	6.9576	48.4087	64

Analysis of Variance

	Sum of Squares	Degrees of Freedom	Mean Squared
Between Groups	2488.6912	(15)	165.9127
Within Groups	25334.1870	(682)	37.1469
Total	27822.8782	(697)	

F = 4.4664 p = .0000 ETA squared = .0894

APPENDIX J: DATA ANALYSIS

J4: STATISTICAL DETAILS OF PARTICIPATION INDEX SCORES BY SCHOOL

SCHOOL GROUP	MEAN SCORE	STD. DEVIATION	VARIANCE	NUMBER
Total Sample	- 8.2826	6.5425	42.8037	637
School 1	- 6.9706	4.7767	22.8173	34
" 2	- 5.3810	6.0040	36.0476	21
" 3	- 6.8409	7.0775	50.0904	44
" 4	- 7.7778	6.7996	46.2349	36
" 5	- 7.0385	3.8624	14.9185	26
" 6	- 9.1563	6.6919	44.7813	32
" 7	- 9.8462	7.2771	52.9563	52
" 8	- 9.2444	5.9778	35.7343	45
" 9	- 9.8182	6.2373	38.9034	33
" 10	-10.1667	6.3223	39.9714	36
" 11	-10.1786	7.9341	62.9494	56
" 12	- 8.7273	6.8450	46.8541	44
" 13	- 9.9783	7.1879	51.6662	46
" 14	- 6.9487	4.8718	23.7341	39
" 15	- 6.5556	5.8819	34.5968	36
" 16	- 5.8070	5.5756	31.0871	57

Analysis of Variance

	Sum of Squares	Degrees of Freedom	Mean Squared
Between Groups	1643.3520	(15)	109.5568
Within Groups	25579.7846	(621)	41.1913
Total	27223.1366	(636)	

F = 2.6597 p = .0006 ETA squared = .0604

APPENDIX J: DATA ANALYSIS

J5: STATISTICAL DETAILS OF PERCEIVED PARTICIPATION SCORES BY SCHOOL

SCHOOL GROUP	MEAN SCORE	STD. DEVIATION	VARIANCE	NUMBER
Total Sample	21.8247	6.8097	46.3723	713
School 1	22.8571	6.8648	47.1261	35
" 2	23.1739	7.0237	49.3320	23
" 3	20.9216	7.2245	52.1937	51
" 4	20.6444	7.3736	54.3707	45
" 5	23.7333	6.3731	40.6161	30
" 6	21.4054	7.3237	53.6366	37
" 7	22.5536	7.4441	55.4153	56
" 8	21.0851	6.4229	41.2535	47
" 9	21.0244	6.3972	40.9244	41
" 10	19.4103	5.5237	30.5115	39
" 11	20.5000	5.5301	30.5820	62
" 12	22.4286	6.0999	37.2083	49
" 13	20.3846	7.3355	53.8100	52
" 14	22.2727	6.4244	41.2727	44
" 15	23.1316	7.5630	57.1984	38
" 16	24.4688	6.6975	44.8562	64

Analysis of Variance

	Sum of Squares	Degrees of Freedom	Mean Squared
Between Groups	1363.9876	(15)	90.9325
Within Groups	31653.0980	(697)	45.4133
Total	33017.0856	(712)	

F = 2.0023 p = .0131 ETA squared = .0413

APPENDIX J: DATA ANALYSIS

J6: NEEDS SATISFACTION INDEX SCORES ACCORDING TO SELECTED SCHOOL CHARACTERISTICS

SCHOOL CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	-17.2582	11.4298	130.6405	674	-
Country					
England	-16.7344	11.0420	121.9259	305	F = 1.1700
Western Australia	-17.6911	11.7379	137.7793	369	p = .2798
Size					
Large	-17.6203	11.5727	133.9277	611	F = 6.6165
Small	-13.7460	9.3048	86.5796	63	p = .0103
Environment					
Urban	-17.0000	10.9402	119.6875	65	F = .3245
Suburban	-17.4158	11.5216	132.7477	469	p = .8077
Rural	-18.0227	12.6629	160.3483	44	
Sub-rural	-16.3125	10.8155	116.9750	96	

APPENDIX J: DATA ANALYSIS

J7: PROFESSIONAL ROLE ORIENTATION SCALE SCORES ACCORDING TO SELECTED SCHOOL CHARACTERISTICS

SCHOOL CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	40.2103	6.3139	39.8655	699	NA
Country					
England	41.2257	5.9984	35.9803	319	F = 15.4914
Western Australia	39.3579	6.4524	41.6341	384	p = .0001
Size					
Large	39.9370	6.3459	40.2705	635	F = 13.2211
Small	42.9219	5.3104	28.2001	64	p = .0003
Environment					
Urban	41.6471	6.0341	36.4109	68	F = 7.2492
Suburban	39.4654	6.4101	41.0897	477	p = .0001
Rural	41.5577	6.5870	43.3888	52	
Sub-rural	42.0490	5.2377	27.4332	102	

APPENDIX J: DATA ANALYSIS

J8: PARTICIPATION INDEX SCORES ACCORDING TO SELECTED SCHOOL CHARACTERISTICS

SCHOOL CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	-8.2759	6.5395	42.7652	638	NA
Country					
England	-8.0137	6.3948	40.8933	292	F = .8651
Western Australia	-8.4971	6.6604	44.3609	346	p = .3527
Size					
Large	-8.4211	6.7124	45.0567	577	F = 2.9878
Small	-6.9016	4.3996	19.3568	61	p = .0844
Environment					
Urban	-6.8947	6.5675	43.1316	57	F = 1.3610
Suburban	-8.5543	6.7231	45.2000	442	p = .2537
Rural	-8.4565	6.8206	46.5203	46	
Sub-rural	-7.7097	5.3418	28.5344	93	

APPENDIX J: DATA ANALYSIS

J9: CORRELATION BETWEEN SCHOOL SCORES FOR SATISFACTION INDEX AND PROFESSIONAL ROLE ORIENTATION SCALE

SCHOOL	SATISFACTION INDEX x	x^2	PROFESSIONALISM y	y^2	xy
1	-15.7297	247.4235	43.1471	1861.6722	-678.8909
2	-16.8095	282.5593	41.3913	1713.2397	-695.7671
3	-18.2708	333.8221	41.5102	1723.0967	-758.4246
4	-17.0909	292.0989	41.7778	1745.3845	-714.0202
5	-11.4800	131.7904	43.1724	1863.8561	-495.6192
6	-20.6364	425.8610	40.2105	1616.8843	-829.8000
7	-15.5510	241.8336	39.0189	1522.4745	-606.7829
8	-17.3261	300.1937	41.3043	1706.0451	-715.6424
9	-20.0000	400.0000	41.4444	1717.6382	-828.8880
10	-19.6053	384.3678	39.8462	1587.7196	-781.1967
11	-18.3770	337.7141	38.1967	1458.9878	-701.9408
12	-18.7143	350.2250	41.7800	1745.5684	-781.8835
13	-20.2157	408.6745	40.3922	1631.5298	-816.5566
14	-17.7674	315.6805	40.1915	1615.3566	-714.0985
15	-16.5833	275.0058	36.0606	1300.3668	-598.0037
16	-12.0194	145.9119	37.1875	1382.9101	-446.9714
N=16	$\Sigma x=-276.2368$	$\Sigma x^2=4873.2421$	$\Sigma y=646.6316$	$\Sigma y^2=26192.73$	$\Sigma xy=11164.286$

$$r_{xy} = \frac{N\Sigma xy - \Sigma x.\Sigma y}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}}$$

$$= \frac{16(-11164.286) - (-276.2368)(646.6316)}{\sqrt{[16(4873.2421 - (-276.2386)^2][16(26192.73) - (646.6316)^2}}$$

$$= \frac{-178628.57 - (-178623.44)}{\sqrt{[77971.873 - 76307.764][419083.68 - 418132.42]}}$$

$$= \frac{-5.13}{\sqrt{[1664.109][951.26]}}$$

$$= \frac{-5.13}{\sqrt{1583000.3}}$$

$$= \frac{-5.13}{1258.173}$$

$$= -0.004$$

Not Significant

APPENDIX J: DATA ANALYSIS

J10: CORRELATION BETWEEN SCHOOL SCORES FOR SATISFACTION INDEX AND PARTICIPATION INDEX

SCHOOL	SATISFACTION INDEX x	x^2	PARTICIPATION INDEX y	y^2	xy
1	-15.7297	247.4235	-6.9706	48.5893	109.6454
2	-16.8095	282.5593	-5.3810	28.9552	90.4519
3	-18.2708	333.8221	-6.8409	46.7979	124.9887
4	-17.0909	292.0989	-7.7778	60.4942	132.9296
5	-11.4800	131.7904	-7.0385	49.5405	80.8020
6	-20.6364	425.8610	-9.1563	83.8378	188.9531
7	-15.5510	241.8336	-9.8462	96.9477	153.1183
8	-17.3261	300.1937	-9.2444	85.4589	160.1694
9	-20.0000	400.0000	-9.8182	96.3971	196.3640
10	-19.6053	354.3678	-10.1667	103.3618	199.3212
11	-18.3770	337.7141	-10.1786	103.6039	187.0521
12	-18.7143	350.2250	-8.7273	76.1658	163.3253
13	-20.2157	408.6745	-9.9783	99.5665	201.7183
14	-17.7674	315.6805	-6.9487	48.2844	123.4603
15	-16.5833	275.0058	-6.5556	42.9759	108.7135
16	-12.0794	145.9119	-5.8070	33.7212	70.1451
N=16	Σx=-276.2368	Σx^2=4873.2421	Σy=130.4361	Σy^2=1104.6981	Σxy=2291.1582

$$r_{xy} = \frac{N\Sigma xy - \Sigma x.\Sigma y}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}}$$

$$= \frac{16(2291.1582 - (-276.2368)(- 130.4361)}{\sqrt{[16.4873.2421 - (-276.2368)^2][16(1104.6981) - (-130.4361)^2]}}$$

$$= \frac{36658.531 - 36031.485}{\sqrt{[77971.873 - 76306.769][17675.169 - 17013.576]}}$$

$$= \frac{627.046}{\sqrt{[1665.104][661.593]}}$$

$$= \frac{627.281}{\sqrt{1101621.1}}$$

$$= \frac{627.281}{1049.5814}$$

$$= 0.5976487$$

This is significant to = .05 level

APPENDIX J: DATA ANALYSIS

J11: CORRELATION BETWEEN SCHOOL SCORES FOR THE PROFESSIONAL ROLE ORIENTATION SCALE AND THE PARTICIPATION INDEX

SCHOOL	PROFESSIONALISM		PARTICIPATION INDEX		
	x	x^2	y	y^2	xy
1	43.1471	1861.6722	-6.9706	48.5893	-300.7612
2	41.3913	1713.2397	-5.3810	28.9552	-222.7266
3	41.5102	1723.0967	-6.8409	46.7979	-283.9671
4	41.7778	1745.3845	-7.7778	60.4942	-324.9394
5	43.1724	1863.8561	-7.0385	49.5405	-303.8589
6	40.2105	1616.8843	-9.1563	83.8378	-368.1794
7	39.0189	1522.4745	-9.8462	96.9477	-384.1879
8	41.3043	1706.0451	-9.2444	85.4589	-381.8335
9	41.4444	1717.6382	-9.8182	96.3971	-406.9094
10	39.8462	1587.7196	-10.1667	103.3618	-405.1044
11	38.1967	1458.9878	-10.1786	103.6039	-388.7889
12	41.7800	1745.5684	-8.7273	76.1658	-364.6266
13	40.3922	1631.5298	-9.9783	99.5665	-403.0455
14	40.1915	1615.3566	-6.9484	148.2844	-279.2666
15	36.0606	1300.3668	-6.5556	42.9759	-236.3989
16	37.1875	1382.9101	-5.8070	33.7212	-215.9478
N=16	$\Sigma x=646.6316$	$\Sigma x^2=26192.73$	$\Sigma y=-130.4361$	$\Sigma y^2=1104.6981$	$\Sigma xy=-5270.5521$

$$r_{xy} = \frac{N\Sigma xy - \Sigma x \Sigma y}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}}$$

$$= \frac{16(-5270.5521) - (646.6316)(-130.4361)}{\sqrt{[16(26192.73) - (646.6316)^2][16(1104.6981) - (-130.4361)^2]}}$$

$$= \frac{-84328.833 - (-84344.104)}{\sqrt{[419083.68 - 418132.42][17675.169 - 17013.576]}}$$

$$= \frac{15.270}{\sqrt{[951.26][661.593]}}$$

$$= \frac{15.270}{\sqrt{629346.95}}$$

$$= \frac{15.270}{793.3139}$$

$$= 0.0192$$

Not significant

APPENDIX J: DATA ANALYSIS

J12: STATISTICAL DETAILS OF NEEDS SATISFACTION INDEX SCORES BY SELECTED TEACHER CHARACTERISTICS

TEACHER CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	-17.2229	11.4015	129.9949	673	NA
Sex					
Male	-15.7718	10.9898	120.7751	412	F = 17.6328
Female	-19.5134	11.6819	136.4662	261	p = .0000
Marital Status					
Married	-17.1356	11.4506	131.1153	472	F = 1.5930
Single	-18.7536	11.2372	126.2746	138	p = .2041
Other	-15.5405	11.2709	127.0330	37	
Age					
Under 25	-19.9146	10.4470	109.1408	82	F = 3.1534
25 - 29	-18.9771	10.8469	117.6546	175	p = .0080
30 - 39	-16.6455	11.4566	131.2527	220	
40 - 49	-15.5877	11.6549	135.8374	114	
50 - 59	-14.4688	12.4658	155.3958	64	
Over 59	-19.4286	13.5260	182.9524	7	
Experience					
1 year	-19.1538	11.3683	129.2389	39	F = 4.8861
2 years	-19.9524	11.4123	130.2416	42	p = .0002
3 - 5 years	-20.3385	10.9393	119.6675	130	
6 - 10 years	-17.5025	10.8164	116.9938	203	
11 - 20 years	-15.4545	11.6681	136.1450	154	
Over 20 years	-13.6377	11.7122	137.1756	69	
Status					
Principal	- 6.4375	8.5007	72.2625	16	F = 18.4420
Deputy	- 8.7600	7.9962	63.9400	25	p = .0000
Middle Management	-15.4446	10.5730	111.7874	279	
Class Teacher	-19.7106	11.5919	134.3729	349	

continued

APPENDIX J12 (continued)

Years in School					
1	-19.2763	11.5622	133.6847	152	F = 3.4656
2	-19.6396	11.3127	127.9781	111	p = .0042
3 - 5	-16.2850	10.6387	113.1813	214	
6 - 10	-15.2240	11.0116	121.2559	125	
11 - 20	-16.0444	13.9153	193.6343	45	
Over 20	-12.7500	7.1264	50.7857	8	
Teaching Subject					
Humanities	-17.0987	11.6219	135.0697	152	F = 1.1318
Social Science	-17.0000	12.1136	146.7397	74	p = .3331
Natural Science	-15.7253	10.7249	115.0237	91	
Mathematics	-17.1000	10.4888	110.0152	80	
Technology	-17.9273	10.6055	112.4761	55	
Physical Education	-16.9298	10.9036	118.8878	57	
Fine Arts	-19.0000	11.4156	130.3158	39	
Home Economics	-17.9394	11.1746	124.8712	33	
Commerce	-20.4400	13.3731	178.8400	25	
Special Education	-17.0500	10.8505	117.7342	20	
Not Teaching	-10.0769	10.7274	115.0769	13	
Others	-20.3125	13.4175	180.0282	32	
Qualifications					
High	-16.3729	11.5370	133.1029		F = 1.4912
Average	-17.1156	11.4124	130.2424		p = .2258
Low	-18.1303	11.2406	126.3522		

APPENDIX J: DATA ANALYSIS

J13: STATISTICAL DETAILS OF PERCEIVED PERSONAL NEEDS SATISFACTION SCORES BY SELECTED TEACHER CHARACTERISTICS

TEACHER CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	60.9423	13.1548	173.0488	711	
Sex					
Male	62.5622	13.1074	171.8033	454	F = 17.2791
Female	58.4043	12.8467	165.0388	277	p = .0000
Marital Status					
Married	61.1948	13.0542	170.4122	503	F = 1.1635
Single	59.4507	13.3377	177.8947	142	p = .3130
Other	59.4872	13.3828	179.0985	39	
Age					
Under 25	56.3372	11.1309	123.8967	86	F = 7.9640
25 - 29	58.0973	12.1727	148.1753	185	p = .0000
30 - 39	61.2987	13.1063	171.7756	231	
40 - 49	63.9120	13.0712	170.8551	125	
50 - 59	66.5152	14.9587	223.7613	66	
Over 59	63.5714	12.7129	161.6190	7	
Experience					
1 year	57.1000	12.3097	157.5282	40	F = .4619
2 years	57.5111	10.6486	113.3919	45	p = .0000
3 - 5 years	55.2101	12.0149	144.3570	138	
6 - 10 years	60.6197	12.6447	159.8878	213	
11 - 20 years	63.6527	12.8222	164.4088	167	
Over 20 years	67.3099	13.0434	170.1312	71	
Status					
Principal	76.7500	12.6254	159.4000	16	F = 35.4414
Deputy	74.0741	9.2899	86.3020	27	p = .0000
Middle Management	63.6169	12.0204	144.4888	295	
Class Teacher	57.1578	12.6742	160.6345	369	

continued

APPENDIX J13 (continued)

Years in School					
1	58.1768	13.0802	171.0912	164	F = 5.4812
2	58.0840	11.9409	142.5861	119	p = .0001
3 - 5	61.3304	12.7648	162.9397	224	
6 - 10	63.6692	12.9503	167.7114	130	
11 - 20	64.3191	14.9624	223.8742	47	
Over 20	71.0000	11.9523	142.8571	8	
Teaching Subject					
Humanities	61.4458	12.8363	164.7698	166	F = 1.9837
Social Science	61.7200	13.4843	181.8259	75	p = .0274
Natural Science	61.8039	12.7171	161.7235	102	
Mathematics	59.6707	12.4564	155.1618	82	
Technology	61.3276	12.7601	162.8206	58	
Physical Education	61.4737	12.6309	159.5395	57	
Fine Arts	55.1190	14.2952	204.3573	42	
Home Economics	59.7353	13.2809	176.3824	34	
Commerce	59.0400	13.9537	194.7067	25	
Special Education	59.7727	11.2501	126.5649	22	
Not Teaching	72.2143	16.6361	244.4890	14	
Others	61.2500	13.4428	180.7097	32	
Qualifications					
High	62.0118	12.8033	163.9251	255	F = 2.9202
Average	61.6188	13.8758	192.5372	181	p = .0546
Low	59.4228	12.8380	164.8132	272	

APPENDIX J: DATA ANALYSIS

J14: STATISTICAL DETAILS OF PROFESSIONAL ROLE ORIENTATION SCALE SCORES BY SELECTED TEACHER CHARACTERISTICS

TEACHER CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	40.2299	6.3076	39.7859	696	NA
Sex					
Male	40.4732	6.6260	43.9041	429	F = 1.6655
Female	39.8390	5.7498	33.0604	267	p = .1973
Marital Status					
Married	40.4698	6.2851	39.5201	496	F = 1.4074
Single	39.4599	6.0767	36.9267	137	p = .2455
Other	40.0270	7.0415	49.5826	37	
Age					
Under 25	40.2697	5.6604	32.0401	89	F = 1.9347
25 - 29	41.1436	6.1126	37.3643	188	p = .0865
30 - 39	40.3814	6.7203	45.1623	215	
40 - 49	39.0325	6.1842	38.2448	123	
50 - 59	39.7424	6.0595	36.7172	66	
Over 59	42.3333	4.4121	19.4667	6	
Experience					
1 year	39.5000	6.1436	37.7436	40	F = .5836
2 years	40.7391	5.5315	30.5971	46	p = .7126
3 - 5 years	40.3453	5.7278	32.8074	139	
6 - 10 years	40.6827	6.4931	42.1597	208	
11 - 20 years	40.0062	6.8621	47.0880	160	
Over 20 years	39.5034	6.2100	38.5638	71	
Status					
Principal	41.6667	5.5248	30.5238	15	F = 4.4001
Deputy	41.2692	6.3972	40.9246	26	p = .0045
Middle Management	41.1039	6.2236	38.7338	279	
Class Teacher	39.4176	6.3341	40.1212	376	

continued

APPENDIX J14 (continued)

Years in School					
1	39.7744	6.1528	37.8568	164	F = 1.5119
2	39.7600	6.6069	43.6516	125	p = .1839
3 - 5	41.2028	5.8869	34.6553	212	
6 - 10	39.9380	6.7913	46.1211	129	
11 - 20	40.5909	5.8720	34.4799	44	
Over 20	38.3333	7.9415	63.0667	6	
Teaching Subject					
Humanities	39.9825	5.9789	35.7467	171	
Social Science	39.3553	7.0724	50.0188	76	F = 1.1592
Natural Science	40.8416	6.6914	44.7744	101	p = .3123
Mathematics	40.1059	6.3734	40.6196	85	
Technology	40.8000	6.4101	41.0889	55	
Physical Education	42.2745	5.8381	34.0831	51	
Fine Arts	39.4359	6.5646	43.0945	39	
Home Economics	40.9091	5.1440	26.4602	33	
Commerce	38.5652	6.8412	46.8024	23	
Special Education	40.4000	6.1507	37.8316	20	
Not Teaching	41.0769	4.4057	19.4103	13	
Others	38.8571	5.8986	34.7937	28	
Qualifications					
High	40.1008	6.2862	39.5161	248	F = 1.3806
Average	39.6914	6.5343	42.6973	175	p = .2521
Low	40.6777	6.1577	37.9178	273	

APPENDIX J: DATA ANALYSIS

J15: STATISTICAL DETAILS OF PARTICIPATION INDEX SCORES BY SELECTED TEACHER CHARACTERISTICS

TEACHER CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	- 8.2787	6.5533	42.9458	635	NA
Sex					
Male	- 7.8093	6.5635	43.0798	388	F = 5.1526
Female	- 9.0162	6.4820	42.0160	247	p = .0235
Marital Status					
Married	- 8.1689	6.3606	40.4569	450	F = .8997
Single	- 8.9766	6.8968	47.5664	128	p = .4072
Other	- 8.9714	8.0128	64.2050	35	
Age					
Under 25	-10.0000	6.5911	43.4430	80	F = 5.3478
25 - 29	- 9.2156	6.1469	37.7846	167	p = .0001
30 - 39	- 8.5437	6.6226	43.8591	206	
40 - 49	- 6.7222	6.1155	37.3985	108	
50 - 59	- 5.8833	6.9088	47.7319	60	
Over 59	- 4.0000	8.3666	70.0000	6	
Experience					
1 year	-12.0000	6.8385	46.7647	35	F = 7.4301
2 years	- 9.9024	6.3435	40.2402	41	p = .0000
3 - 5 years	- 9.3701	5.8320	34.0127	127	
6 - 10 years	- 8.7068	6.5380	42.7452	191	
11 - 20 years	- 7.3356	6.2104	38.5693	146	
Over 20 years	- 5.2969	6.2581	39.1644	46	
Status					
Principal	- 1.1250	4.0641	16.5167	16	F = 19.2789
Deputy	- 3.3704	4.5332	20.5499	27	p = 0
Middle Management	- 7.3810	6.1221	37.4798	252	
Class Teacher	- 9.5882	6.5198	42.5084	340	

continued

APPENDIX J15 (continued)

Years in School					
1	-10.0616	6.5750	43.2307	146	F = 8.6286
2	-10.2456	6.6553	44.2931	114	p = .0000
3 - 5	-7.4592	6.0395	36.4752	196	
6 - 10	-6.1780	6.1791	38.1817	118	
11 - 20	-6.7500	5.9646	35.5769	40	
Over 20	-5.3750	6.4794	41.9821	8	
Teaching Subject					
Humanities	-8.1290	6.4099	41.0871	155	F = 2.0919
Social Science	-7.5075	5.8137	32.7992	67	p = .0191
Natural Science	-8.1250	6.6896	44.7512	104	
Mathematics	-8.5429	6.8009	46.2518	70	
Technology	-8.5652	5.8296	33.9845	46	
Physical Education	-8.5600	6.4084	41.0678	50	
Fine Arts	-11.0000	7.1622	51.2973	38	
Home Economics	-8.9310	6.5951	43.4951	29	
Commerce	-10.3500	6.5315	42.6605	20	
Special Education	-6.2500	5.5438	30.7333	16	
Not Teaching	-2.3077	4.6077	21.2308	13	
Others	-8.0000	8.1437	66.3200	26	
Qualification					
High	-8.3930	6.6671	44.4501	229	F = .4066
Average	-7.8924	6.4181	41.1922	158	p = .6661
Low	-8.4637	6.5186	42.4926	248	

APPENDIX J: DATA ANALYSIS

J16: STATISTICAL DETAILS OF PERCEIVED PARTICIPATION SCORES BY SELECTED TEACHER CHARACTERISTICS

TEACHER CHARACTERISTIC	MEAN SCORE	STANDARD DEVIATION	VARIANCE	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
Total Sample	21.8298	6.8153	46.4485	711	NA
Sex					
Male	23.0390	7.3448	53.9456	436	F = 37.2978
Female	19.9127	5.3573	28.7004	275	p = .0000
Marital Status					
Married	22.0637	6.8017	46.2634	502	F = 3.1293
Single	20.6122	6.2641	39.2390	147	p = .0444
Other	20.7105	6.1332	37.6166	38	
Age					
Under 25	18.4333	4.0890	16.7202	90	F = 13.6087
25 - 29	20.1497	4.5067	20.3108	187	p = .0000
30 - 39	22.4087	6.9564	48.3912	230	
40 - 49	23.6210	8.0016	64.0259	124	
50 - 59	24.7424	8.8549	78.4096	66	
Over 59	29.0000	9.6954	94.0000	6	
Experience					
1 year	17.4651	3.2466	10.5404	43	F = 23.4483
2 years	18.7500	4.4205	19.5407	44	p = .0000
3 - 5 years	19.2270	4.7470	22.5338	141	
6 - 10 years	21.0981	5.5365	30.6523	214	
11 - 20 years	23.9699	7.6169	58.0173	166	
Over 20 years	26.1972	8.0704	65.1320	71	
Status					
Principal	36.4375	8.0991	65.5958	16	F =137.7203
Deputy	33.3333	6.1331	37.6154	27	p = .0000
Middle Management	24.1119	6.5898	43.4260	286	
Class Teacher	18.7244	4.1116	16.9054	381	

continued

APPENDIX J16 (continued)

Years in School					
1	19.5647	5.6116	31.4899	170	F = 12.6980
2	20.5082	5.0407	25.4090	122	p = .0000
3 - 5	21.8761	6.6401	44.0906	218	
6 - 10	24.1955	7.5743	57.3706	133	
11 - 20	25.0222	8.5213	72.6131	45	
Over 20	29.1250	10.4315	108.9821	8	
Teaching Subject					
Humanities	22.7861	7.5702	57.3086	173	F = 3.3106
Social Science	23.3553	7.2474	52.5254	76	p = .0002
Natural Science	22.3670	6.6579	44.3270	109	
Mathematics	20.6512	5.9424	35.3122	86	
Technology	20.6154	5.9083	34.9080	52	
Physical Education	21.5273	7.0523	49.7354	55	
Fine Arts	19.2000	4.9933	24.9333	40	
Home Economics	19.9706	5.2251	27.3021	34	
Commerce	19.5000	5.0498	25.5000	22	
Special Education	21.2105	4.7560	22.6199	19	
Not Teaching	28.2308	9.1301	83.3590	13	
Others	21.1935	6.9398	48.1613	31	
Qualifications					
High	22.8643	7.4296	55.1994	258	F = 13.1362
Average	22.8077	7.4531	55.5484	182	p = .0000
Low	20.1889	5.2582	27.6482	270	

APPENDIX J: DATA ANALYSIS

J17: MISCELLANEOUS SIGNIFICANT SCORES OF TEST RESULTS

PART	VARIABLE	TEACHER GROUP	MEAN	STANDARD DEVIATION	NO	SIGNIFICANCE ANALYSIS OF VARIANCE
1	Perceived Personal Needs Satisfaction	English	59.5656	12.9744	320	F = 6.0975
		Western Australian	62.0077	13.2496	392	p = .0138
2	Perceived Personal Needs Satisfaction	Teachers of:				
		Humanities	61.4458	12.8363	166	
		Social Studies	61.7200	13.4843	75	F = 1.9837
		Natural Science	61.8039	12.7171	102	p = .0274
		Maths	59.6707	12.4564	82	
		Technology	61.3276	12.7601	58	
		Physical Education	61.4737	12.6309	57	
		Fine Arts	55.1190	14.2952	42	
		Home Economics	59.7350	13.2809	34	
		Commerce	59.0400	13.9537	25	
		Special Education	59.7727	11.2501	22	
		Not Teaching	72.2143	15.6361	14	
		Others	61.2500	13.4428	32	
3	Perceived Personal Needs Satisfaction	Qualifications:				
		High	62.0118	12.8033	255	F = 2.9202
		Medium	61.6188	13.8758	181	p = .0543
		Low	59.4228	12.8380	272	
4	Perceived Participation	Qualifications:				
		High	22.8643	7.4296	258	F = 13.1362
		Medium	22.8077	7.4531	182	p = .0000
		Low	20.1889	5.2582	270	

BIBLIOGRAPHY

Adams, C.F. (1969). The relationship of teacher alienation to the organizational structure of schools. Ed.D. thesis, State University of New York at Buffalo.

Adams, R.S., Kimble, R.M. and Marlin, M. (1970). School size, organizational structure and teaching practices. Education Administration Quarterly, 6(3).

Adelson, G.I. (1972). A study of the relationship between teacher participation in decision making and the organizational climate of the school. Ed.D. thesis, State University of New York at Albany.

Alutto, J.A. and Belasco, J.A. (1971). Decisional deprivation, equilibrium and saturation as variables in educational research. Paper presented at the 1971 meeting of the American Educational Research Association, New York.

Alutto, J.A. and Belasco, J.A. (1972). A typology for participation in organizational decision making. Administration Science Quarterly 17, 117-125.

Alutto, J.A. and Belasco, J.A. (1973). Patterns of teacher participation in school system decision making. Education Administration Quarterly, 9(1),29-41.

Ambrosie, F. (1968). Personal characteristics of secondary school principals and their relationship to teacher participation in decision making. Ed.D thesis, State University of New York at Buffalo.

Ambrosie, F. and Heller, R.W. (1972). The secondary school administrator and perceived participation in the decision making process. Journal of Experimental Education, 40(4), 6-13.

Anderson, L.W. (1953). Teacher morale and student achievement. Journal of Educational Research, 46, 693-698.

Andrews, J. (1965). School organizational climate: some validity studies. Canadian Education and Research Digest, December, 1965, 317-334.

Archambault, E.D. (1967). Teacher role in school policy development. Ph.D. thesis, University of Iowa.

Argyris, C. (1957). Personality and the organization. New York: Harper.

Argyris, C. (1957a). The individual and organization: some problems of mutual adjustment. In Houghton, V., McHugh, R. and Morgan C. eds. Management in education - Reader 1. (1975) London: Ward Lock Educational in association with Open University Press.

Argyris, C. (1959). Understanding human behaviour in organization. In Haire Mason, ed. Modern organization theory: a symposium of the Foundation for Research on Human Behaviour. New York: John Wiley & Sons.

Argyris, C. (1960). Understanding organizational behaviour. Homewood: The Dorsey Press.

Argyris, C. (1960a). Individual actualisation in complex organizations. In Carver, F.D. and Sergiovanni T.J. eds. Organizations and human behaviour: focus on schools. (1969) New York: McGraw Hill.

Argyris, C. (1973). Personality and organization theory revisited. Administration Science Quarterly, 18(2), 141-167.

Baldridge, J.V. and Deal, T.E. eds. (1975). Managing change in educational organizations. Berkeley, Calif.: McCutchan Publishing Corporation.

Barile, P.A. (1971). Properties of organizational structure,teacher personality characteristics, and their relationship to teacher role behaviour. Ed.D. thesis, University of New York.

Barnard, C. (1946). Functions and pathology of status systems in formal organizations. In Carver, F.D. and Sergiovanni, T.J. Organizations and human behaviour: focus on schools. (1969). New York: McGraw Hill.

Barnard,C. (1962. The functions of the executive. Cambridge, Mass.: Harvard University Press.

Barnett, M.R. (1970). Effects of organizational change on job satisfaction of employees. Ed.D. thesis, North Carolina State University at Raleigh.

Baron, G., Cooper, D. and Walker, W.G. eds. (1969). Educational administration: international perspectives. New York: Rand McNally.

Baron, G. (1969a). The study of educational administration in England. In Baron, G. and Taylor, W. eds. Educational administration and the social sciences. The Athlone Press of the University of London.

Baron, G. (1975). Some aspects of the "Headmaster Tradition". In Houghton, V., McHugh, R. and Morgan C. eds. Management in education - Reader 1. London: Ward Lock Educational in association with Open Unversity Press.

Baron, G. (1975a). Approaches to educational administration as a field of study. In Hughes, M. ed. Administering education: international challenge. London: Athlone Press, University of London.

Barrett, T.C. (1969). Relationship between perceived faculty participation in the decision-making process and job satisfaction in the community colleges of North Carolina. Ed.D. thesis, North Carolina State University at Raleigh.

Barry, C.H. and Tye, F. (1972). Running a school. London: Maurice Temple Smith.

Bassett, G.W. (1971). Change in Australian education. Australian Journal of Education, 15(1), 42-57.

Bates, A.W. (1971). The administration of comprehensive schools (with particular reference to the relationship between the work of teachers and the kind of comprehensive school in which they serve). Ph.D. thesis, University of London.

Battles, J.A. (1971). An analysis of the relationship between teacher involvement and teacher feelings of powerlessness. Ph.D. thesis, Bowling Green State University.

Bauer, R.A. and Gergen, K.J. (1968). The study of policy formation. New York: The Free Press.

Belasco, J.A. and Alutto, J.A. (1969). Organizational impacts of teacher organizations. Industrial Relations, 9.

Belasco, J.A. and Alutto, J.A. (1972). Decisional participation and teacher satisfaction. Education Administration Quarterly, 8(1).

Bennett, S. and Wilkie, R. (1973). The school and organization theory. In Fowler, G., Morris, V. and Ozga, J. eds. Decision making in British education. London: Heinemann (Open University).

Bentley, R.B. and Rempel, A.M. (1963). Peer selection versus expert judgement as a means of validating a teacher morale measuring instrument. Journal of Experimental Education 31(3), 233-240.

Bentley, R.R. and Rempel, A.M. (1970). Teacher morale: relationship with selected factors. Journal of Teacher Education, 11(4), 534-539.

Bentley, R.R. and Rempel, A.M. (1970). Manual for the Purdue Teacher Opinionnaire. West Lafayette, Indiana: University Book Store.

Bentley, R.R. and Rempel, A.M. (1973). The Purdue Teacher Opinionnaire. Lafayette, Indiana: Purdue University Press.

Berck, W.F. (1967). The relationship of consensus and involvement to teacher job satisfaction. Ed.D. thesis, University of California, Berkeley.

Berg, P. (1977). The impact of collective bargaining upon the principal. Administrators Notebook, 21(9), 1-4.

Bergstein, N.L. (1972). The relationships amongst teachers' perceptions of their participation in decision making, openness of organizational climate, and organizational output in a sample of non-secondary public schools. Ed.D. thesis, University of Rochester.

Best, J.K. (1973). Decisional status and teacher morale: a study of the relationship between decisional condition, decisional deviation and teacher morale. Ed.D. thesis, State University of New York at Buffalo.

Bidwell, C.E. (1955). The administrative role and satisfaction in teaching. Journal of Educational Sociology, 29, 41-47.

Bidwell, C.E. (1956). Administration and teacher satisfaction. Phi Delta Kappan, 37, 285-288.

Blai, B. (1964). An occupational study of job satisfaction and need satisfaction. Journal of Experimental Education, 32, 383-388.

Blau, P.M. (1954). Co-operation and competition in a bureaucracy. Journal of Sociology, 59, 530-535.

Blau, P.M. (1960). Structural effects. American Sociological Review, 25(2).

Blau, P.M. and Scott, W.R. (1960). The nature and types of formal organizations. In Carver, F.D. and Sergiovanni, T.J. Organizations and human behaviour: focus on schools. (1969) New York: McGraw Hill.

Blau, P.M. and Scott, W.R. (1963). Formal organizations: a comparative approach. London: Routledge and Kegan Paul.

Block, J.H. (1971). Mastery learning: theory and practice. New York: Holt, Rinehart and Winston.

Bloom, B.S. ed. (1956). Taxonomy of educational objectives: the classification of educational goals. Book 1. London: Longman.

Bloom, B.S., Krathwohl, D.R. and Masia, B.B. (1964). Taxonomy of educational objectives: the classification of educational goals. Book 2. London: Longman.

Blumberg, A. and Amidon, E. (1963). Teacher reactions to school faculty meetings. Journal of Educational Research, 56(9), 466-470.

Blumberg, A. and Amidon, E. (1965). Teacher perceptions of supervisor teacher interaction. Administrators Notebook, 14(1).

Blumberg, A. (1968). Supervisory behaviour and interpersonal relations. Education Administration Quarterly, 4(2).

Blumberg, A. and Weber, W.A. (1968). Teacher morale as a function supervisor behavioural style. Journal of Educational Research, 62(3), 109-113.

Bolam, R. (1975). The management of educational change: towards a conceptual framework. In Houghton, V., McHugh, R. and Morgan C. eds. Management in education - Reader 1. London: Ward Lock Educational in association with Open University Press.

Bonnette, D.J. (1975). A study of the relationship between teacher perceptions of their participation in school system decision making and specified outcomes of collective bargaining. Ph.D. thesis, University of Michigan.

Bridges, E.M. (1964). Teacher participation in decision making. Administrators Notebook, 12(9), 1-4.

Bridges, E.M. (1967). A model for shared decision making in the school principalship. Education Administration Quarterly, 111(1), 48-61.

Bridges, E.M. (1969). Subjective and objective aspects of demands for involvement. Administrators Notebook, 17, 1-4.

Brown, F. (1970). Needs satisfaction of educational administrators. Ph.D. thesis, University of California, Berkeley.

Bumbarger, C.S. (1966). Differences in teacher and administrator perceptions of public school decision making: a comparative study in selected Oregon school districts. Ed.D. thesis, University of Oregon.

Burket, C.A. (1965). The relationship between teacher morale and democratic school administration. Ed.D. thesis, University of Pittsburgh.

Burroughs, G.E.R. (1971). Design and analysis in educational research. Educational Review, University of Birmingham: School of Education.

Calvery, R.S. (1975). The relationship between the bureaucratic structure and the organizational climate of selected elementary schools. Ed.D. thesis, Mississippi State University.

Campbell, R.F. (1958). What peculiarities in educational administration make it a special case? In Halpin, A.W. ed. Administrative theory in education. Chicago, Mid West Administration Centre.

Carpenter, H.H. (1969). The relationship between certain organizational structure factors and perceived needs satisfaction of classroom teachers. Ed.D. thesis, University of Houston.

Carpenter, H.H. (1971). Formal organizational structural factors and perceived job satisfaction of classroom teachers. Administration Science Quarterly, 16, 460-465.

Carr, R.W. (1971). A study of the job satisfaction of high school principals. Ph.D. thesis, University of Michigan.

Cartwright, D. and Zander, A. (1960). Group dynamics: research and theory. London: Tavistock.

Carver, F.D. and Sergiovanni, T.J. (1969). Some notes on the OCDQ. Journal of Educational Administration, 7(1).

Carver, F.D. and Sergiovanni, T.J. eds. (1969a). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Carver, F.D. and Sergiovanni, T.J. (1971). Complexity, adaptability and job satisfaction in high schools: an axiomatic theory applied. Journal of Educational Administration, 10(1), 10-31.

Catherwood, L.K. (1973). A study of hierarchical position and need satisfaction of professional school personnel. Ed.D. thesis, Oklahoma State University.

Chamberlain, J.L. (1976). The opinions of teachers and principals on teacher participation in decision making. Ph.D. thesis, University of Oregon.

Chase, F.S. (1951). Factors for satisfaction in teaching. Phi Delta Kappan, 33, 127-132.

Chase, F.S. (1952). The teacher and policy making. Administrators Notebook, 1(1), 14.

Chase, F.S. (1953). How to meet teachers' expectations of leadership. Administrators Notebook, 1, 1-4.

Chisolm, G.B. (1976). Need achievement and need fulfillment deficiencies as they affect promotional aspirations of education. Ph.D. thesis, New York University.

Chu, G.S. (1977). A study of different perceptions of faculty participation in policy making in community colleges in the States of Maryland and Virginia. Ph.D. thesis, University of Maryland.

Cohen, L. (1969). Functional dependence, exchanges and power influence. International Journal of Educational Sciences, 3.

Cohen, L. (1969,1970). Conceptions of headteachers concerning their role. Ph.D. thesis, University of Keele.

Cohen, L. (1970). Schools size and head teachers' bureaucratic role conceptions. Educational Review, 23, 50-58.

Cohen, L. (1971). Age and headteachers' role conceptions. Educational Research, 14(1), 35-39.

Cohen, L. and Cherrington, D. (1973). Leadership effectiveness in an educational setting. Educational Research, 15(2), 154-156.

Cohen, L. (1976). Educational research in classrooms and schools. London: Harper and Row.

Collins, J.A. (1965). Individual personality and organizational climate. Ph.D. thesis, Claremont Graduate School and University Centre.

Colombotos, J.L. (1961). Sources of professionalism: a study of high school teachers. Ph.D. thesis, University of Michigan.

Colombotus, J. (1963). Sex role and professionalism: a study of high school teachers. School Review, 71(1), 27-40.

Conway, J.A. (1973). Participative decision making and perceptions of organizations: refinement of and test of a decisional deviation index. Paper for American Educational Research Association, New Orleans, March 1973.

Conway, J. A. (1978). Power and participatory decision making in selected English schools. Journal of Educational Administration 16(1), 80-96.

Corwin, R.G. (1963). The development of an instrument for examining staff conflicts in the public schools. Co-operative Research Project No.1934, Department of Sociology and Anthropology, Ohio State University.

Corwin, R.G. (1965). Militant professionalism, initiative and compliance in public education. Sociology of Education 35, 310-331.

Corwin, R.G. (1965a). A sociology of education: emerging patterns of status, class and power in the public schools. New York: Appleton-Century Crofts.

Corwin, R.G. (1965b). Professional persons in public organizations. Education Administration Quarterly, 3(1), 1-22.

Corwin, R.G. (1968). Teacher militancy in the United States: reflections on the sources and prospects. Theory into Practice, 8, 96-102.

Corwin, R.G. (1970). Militant professionalism: a study of organizational conflict in high schools. New York: Appleton Century Crofts.

Coughlan, R.J. (1969). An assessment of teacher work values. Education Administration Quarterly, 5(3), 53-73.

Coughlan, R.J. (1969a). The factorial structure of teacher work values. American Educational Research Journal, 6, 169-189.

Coughlan, R.J. (1970). Job satisfaction in relatively closed and open schools. Education Administration Quarterly, 7(2).

Coughlan, R.J. (1970a). Dimensions of teacher morale. American Educational Research Journal, 7, 221-233.

Coughlan, R.J. (1970b). Social structure in relatively closed and open schools. Education Administration Quarterly, 6(2).

Coughlan, R.J. and Froemel, E.C. (1971). A comparison between two standardised measures of teacher morale. Paper presented to annual meeting of the American Educational Research Association, New York.

Crawford. W.R. (1966). A taxonomy of intellectual processes. Ed.D. thesis, Florida State University.

Croft, J.C. (1968). The principal as supervisor: some descriptive findings and important question. Journal of Educational Administration, 6(2).

Crowther Report (1959). Fifteen to eighteen. Her Majesty's Stationery Office.

Davidson, J.J. (1975). A study of perceptions that New York State elementary and secondary public school teachers have of themselves and one another as professionals. Ed.D. thesis, St. John's University.

Davis, G.T. (1976). The effect of implementing participative management techniques in a large union high school district during the school year 1972-1973. Ed.D. thesis, University of Southern California.

Davis, H., Ware, M.L., Shapiro, F.S., Donald, E. and Steiber, G.H. (1963). Economic, legal and social status of teachers. Review of Educational Research, 33, 398-415.

Davis, H. and Ware, M. (1963a). Social status of teachers. Review of Educational Research, 33, 399-415.

Deem, R. (1976). Professionalism, unity and militant action: the case of teachers. Sociological Review, 24(1), 43-61.

Department of Education and Science (1965). Organization of secondary education, pp.243-255. London: McCorquodale & Co. Ltd. for H.M. Stationery Office.

Department of Education and Science (1975). Phasing out direct grants to grammar schools. Document 7/75, H.M. Stationery Office.

Department of Education and Science (1977). The growth of comprehensive education. Report on Education No.87. London: H.M. Stationery Office.

Department of Education and Science (1977a). Education in schools: a consultative document: the green paper. H.M. Stationery Office.

Dettman, H.W. (1969). Change in school supervision in Western Australia. Australian Journal of Education, June 1969.

Dettman, H.W. (1969a). Secondary education in Western Australia. Perth: Education Department of Western Australia.

Dierenfied, R.B. (1976). The house system in comprehensive schools: its current status. British Journal of Educational Studies, 24(1). 5-11.

Drucker, P.F. (1953). The employee society. American Journal of Sociology, 58(4).

Dunkin, M.J. (1968). The need structure of teachers varying in experience and job satisfaction. Journal of Educational Administration, 6(1), 41-51.

Education Department of Western Australia (1958). The co-educational comprehensive community high schools: an outline of the policy of the Western Australian Education Department. Education Circular, 60(11), 238-241.

Education Development Conference (1974). Educational aims and objectives. Wellington, New Zealand: Government Printer.

Eisenberg, M.E. (1977). Perception of the morale of teachers by elementary school principals in relation to selected factors. Ed.D. thesis, Arizona State University.

Enns, F. (1965). Rating teacher effectiveness: the function of the principal. Journal of Educational Administration, 3, 81-85.

Etzioni, A (1964). Modern Organizations.Englewood Cliffs, N.J.: Prentice Hall Inc.

Etzioni, A. ed. (1969). The semi-professions and their organization: teachers, nurses, social workers. New York: Free Press.

Eye, G.G., Gregg, R.T., Lipham, J.M., Netzer, L.A. and Grancke, D.C. (1966). Relationship between instruction changes and the extent to which school administrators and teachers agree on the location of responsibilities for administrative decisions. Washington, D.C.: U.S. Office of Education Co-operative Research Project No.5-0443.

Falls, O.A. (1976). Participatory leadership: influence and satisfaction with elementary school climate, as perceived by principals, teachers, students and parents. Ph.D. thesis, United States International University.

Fayol, H. (1949). General and industrial management. Translated by Constance Storrs. London: Sir Isaac Pitman and Sons.

Feitler, F.C. (1970). A study of relationships between principal leadership styles and organizational characteristics of elementary schools. Ph.D. thesis, Syracuse University.

Feldman, R.H. (1976). Involvement in and satisfaction with decision making related to staff and student behaviour in IGE schools. Ph.D. thesis, University of Wisconsin-Madison.

Ferraro, M.F. Jnr. (1976). Principals' orientation toward interpersonal interaction, manipulative technique preferences, curricular change, and shared decision making. Ph.D. thesis, Fordham University.

Fiedler, F.E. (1971). Styles of leadership. In Hollander, E.P. and Hunt, R.G. Current perspectives in social psychology. New York: Oxford University Press.

Finlayson, D.S. and Cohen, L. (1967). The teacher's role: a comparative study of the conceptions of college of education students and head teachers. British Journal of Educational Psychology, 37(1), 22-31.

Finlayson, D.S., Banks, O. and Loughran, J.L. (1971). School goal instrument manual. Slough: National Foundation for Educational Research.

Finlayson, D.S., Banks, O. and Loughran, J.L. (1972). School climate index: teacher perception questionnaires. Slough: National Foundation for Educational Research.

Finlayson, D.S. (1973). Measuring school climate. Trends in Education, 31, 19-27.

Finlayson, D.S. (1973). The goal structure of teachers in comprehensive schools. Educational Research, 15, 188-193.

Finlayson, D.S. (1973b). The school perceptions of teachers of different status. Research in Education, 9. Manchester University Press.

Finlayson, D.S. (1974). The factorial structure of comprehensive school teachers' goal conceptions and some organizational features of their schools. Pedagogica Europaea, 10(2), 119-133.

Finlayson, D.S. (1975). Organizational climate: a concept in need of attention in educational research and practice. Research Intelligence, 1, 22-36.

Flagg, J.J. (1964). The organizational climate of schools: its relationship to pupil achievement, size of school and teacher turnover. Ed.D. thesis, Rudgers - The State University.

Ford, J. (1969). Social class and the comprehensive school. London: Routledge and Keegan Paul.

Fox, R.S., Schmuck, R., Van Egmond, E., Rituo, M. and Jung, C. (1973). Diagnosing professional climate of schools. Fairfax, Virginia: NTL Learning Resources Corp. Inc.

Franks, T.D. (1963). A study of teacher morale as related to selected personal and professional factors. Ed.D. thesis, Indiana University.

French, W. (1957). Behavioural goals of general education in high schools. New York: Russel Sage Foundation.

Garber, B. (1974). The relationship between school climate and the rule administration of the elementary school principal. D. Ed. thesis, Pennsylvania State University.

Getzels, J.W. and Guba E.G. (1957). Social behaviour and the administrative process. School Review, 65, 423-441.

Getzels, J.W., Lipham, J.M. and Campbell, R.F. (1968). Educational administration as a social process: theory, research, practice., New York: Harper and Row.

Godfrey, M.P. (1968). Staff participation in decision making procedures in elementary schools. Ph.D. thesis, University of Connecticut.

Goodwin, F.J. (1968). The art of the headmaster. London: Ward Lock International.

Gorton, R.A. (1971). Factors which are associated with the principal's behaviour in encouraging teacher participation in school decision making. Journal of Educational Research, 64(7), 325-327.

Gouldner, A.W. ed. (1950). Studies in leadership. New York: Harper Bros.

Gouldner, A.W. (1957,1958). Cosmopolitans and locals: towards an analysis of latent social roles. Administration Science Quarterly, 2, Part 1, 281-306, Part 2, 444-480.

Gouldner, A.W. (1959). Organizational analysis. In Merton, R.K., Broom, L. and Cottrell, L.S. Jnr. eds. Sociology today: problems and prospects. New York: Basic Books Inc.

Gouldner, A.W. (1960). The norm of reciprocity: a preliminary statement. American Sociological Review, 25(2), 159-178.

Grant, J.O.C. (1977). Open space elementary school: effects on teachers' job satisfaction, participation in curriculum decision making, and perceived school effectiveness. Ph.D. thesis, University of New York at Buffalo.

Grant, J.W. Jnr. (1973). A comparison of teacher morale in selected open and closed climate elementary schools. Ph.D. thesis, University of Maryland.

Grassie, M.C. (1973). High schools as staff perceive them. Journal of Educational Administration, 11(2).

Grassie, M.C. and Carss, B.W. (1973). School structure, leadership quality and teacher satisfaction. Education Administration Quarterly, 9(1).

Gray, H.L. (1975). Exchange and conflict in the school. In Houghton, V., McHugh, R. and Morgan, C. eds. Management in Education - Reader 1 (1975). London: Ward Lock Educational in association with Open University Press.

Gresso, D.W. (1974). Individually guided education and organizational climate. Ed.D. thesis, University of Missouri - Columbia.

Griffiths, D.E. (1959). Administrative theory. New York: Appleton Century Crofts.

Griffiths, D.E. (1959). Administration as decision making. In Carver, F.D. and Sergiovanni, T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Griffiths, D.E., Clark, D., Wynn, R. and Iannacone, L. Organizing schools for effective education. Dawville, Ill.: Interstate Printers.

Griffiths, D.E. ed. (1964). Behavioural science and educational administration. Sixty-third Yearbook of the National Society for the Study of Education, Part 2. Chicago: University of Chicago Press.

Griffiths, D.E. (1964a). Administrative theory and change in organizations. In Carver, F.D. and Sergiovanni, T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Griffiths, D.E. (1969). Developing taxonomies of organizational behaviour in education administration. Chicago: Rand McNally.

Griffiths, D.E. (1974). Intellectualism and professionalism. Education Digest, 34 (5), 38-41.

Gross, N. and Herriott, R.E. (1965). Staff leadership in public schools: a sociological enquiry. New York: John Wiley and Sons.

Gross, N., Mason, W.S. and McEachern, A.W. (1958). Explorations in role analysis: studies of the school superintendency role. New York: John Wiley and Sons.

Gross, R.E. (1975). British secondary education. London: Oxford University Press.

Guba, E.G. (1958). Morale and satisfaction: a study in past-future time perspective. Administration Science Quarterly, 3, 195-209.

Gulick, L. and Urwick, L. eds. (1937). Papers on the science of administration. New York Institute of Public Administration, Columbia University.

Hall, R.H. (1961). An empirical study of bureaucratic dimensions and their relation to other organizational characteristics. Ph.D. thesis, Ohio State University.

Halpin, A.W. (1958). Administrative theory in education. New York: MacMillan.

Halpin, A.W. (1958a). The superintendent's effectiveness as a leader. Administrators Notebook, 7(4), 1-4.

Halpin, A.W. (1966). Theory and research in administration. London: Macmillan, Collier-Macmillan Ltd.

Halpin, A.W. (1967). Change and organizational climate. Journal of Educational Administration, 5(1).

Halpin, A.W. (1966). How leaders behave. In Carver, F.D. and Sergiovanni, T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Hamlin, M.M. (1966). Relationships between organizational climates of elementary schools and the degree of job satisfaction of teachers in the schools. Ph.D. thesis, University of Minnesota.

Haralick, J.G. (1968). Teacher acceptance of administrative action. Journal of Experimental Education, 37(2), 38-47.

Hargreaves, D.H. (1967). Social relations in a secondary school. London: Routledge and Kegan Paul.

Harman, G.L. (1966). Academic policy making: a study of organization and decision makers in a liberal arts college. Ph.D. thesis, Indiana University.

Harris, B.M. (1963). Supervisory behaviour in education. Englewood Cliffs, N.J.: Prentice Hall.

Heller, R.W. (1964). Informal organization and perceptions of the organizational climate of schools. Ed.D. thesis, Pennsulvania State University.

Heller, R.W. (1968). Informal organization and perceptions of the organizational climate of schools. Journal of Educational Research, 61(9), 405-411.

Helsel, R., Aurbach, H. and Willower, D.J. (1969). Teachers' perceptions of organizational climate and expectations of successful change. Journal of Experimental Education, 30, 39-44.

Hempill, J.K. and Coons, A.E. ((1957). Development of the leadership behaviour description questionnaire. In Stogdill, R. and Coons, A.E. eds. Leader behaviour: its description and measurment., Colombus, Ohio: The Bureau of Business Research, Ohio State University, pp.6-38.

Henderson, L.F. (1976). Elementary teacher satisfaction and morale and perceived participation in decision making. Ed.D. thesis, University Arkansas.

Herzberg, F., Mausner, R.B., Peterson, R. and Capewell, D. (1957). Job attitudes: review of research and opinion. Pittsburgh: Psychological service of Pittsburgh.

Herzberg, F., Mausner, B. and Snyderman, B. (1959). The motivation to work. New York: John Wiley and Sons.

Herzberg, F. (1968). One more time: how do you motivate employees? Harvard Business Review, 46(1), 53-62.

Herzberg, F. (1971). Work and the nature of man. New York: World Publishing Co.

Hoy, W.K. (1972). Some further notes on the OCDQ. Journal of Educational Administration, 10(1).

Hoyle, E, (1965). Organizational analysis in the field of education. Educational Research, 7(2).

Hoyle, E. (1969) Organization theory and educational administration. In Baron, G. and Taylor, W. eds. Educational administration and the social sciences. London: Athlone Press of the University of London.

Hoyle, E. (1969a). The role of the teacher. Students Library of Education. London: Routledge and Kegan Paul.

Hoyle, E. (1975). Leadership and decision making in education. In Hughes, M. ed. Administering education international challenge. London: Athlone Press, University of London.

Hoyle, E. (1975a). Professionality, professionalism and control in teaching. In Houghton, V., McHugh, R. and Morgan, C. eds. Management in education - Reader 1. London: Ward Lock Educational in association with Open University Press.

Hoyle, E. (1975b). The study of schools as organizations. In Houghton, V., McHugh, R. and Morgan, C. eds. Management in education - Reader 1. London: Ward Lock Educational in association with Open University Press.

Hrynyk, N.P. (1966). Correlates of professional orientation in teaching. Ph.D. thesis, University of Alberta.

Hsieh, W.C. (1976). A comparative study of relationships between principals' leadership style and teachers' job satisfaction in the Republic of China and the State of Iowa in the United States. Ph.D. thesis, University of Iowa.

Hughes, L.W. (1968). Organizational climate - another dimension to the process of innovation? Education Administration Quarterly, 4(3).

Hughes, M.G. (1970). A new approach. In Hughes. M.G. ed. Secondary school administration: a management approach. Oxford: Pergamon Press Inc.

Hughes, M.G. (1972). The role of the secondary school head. Ph.D. thesis, University of Wales.

Hughes, M.G. (1972a). Headmastership - a role reassessed. London Educational Review, 1(3).

Hughes, M.G. ed. (1975). Administering education: international challenge. London: Athlone Press of the University of London.

Hughes, M.G. (1975a). The professional as administrator: the case of the secondary school head. In Houghton, V., McHugh, R. and Morgan, C. eds. Management in Education - Reader 1. London: Ward Lock Educational in association with Open University Press.

Hughes, M.G. (1976). The innovating school head: autocratic initiator or catalyst of co-operation. Australian Council for Educational Administration Bulletin, No.5.

Hughes, M.G. (1977). Consensus and conflict about the role of the secondary school head. British Journal of Educational Studies, 25(1).

Hughes, M.G. (1978). Recognising professional and administrative concerns. Studies in Educational Administraion, No.13, Commonwealth Council for Educational Administration.

Humble, J.W. ed. (1970). Management by objectives in action. London: McGraw Hill.

Ingram, E.J. (1965). Member involvement in the Alberta Teachers' Association. Ph.D. thesis, University of Alberta.

Inkpen, T.D. (1975). A study of the relationships between perceived teacher participation in decision making and administrator leader behaviour machiavellianism and risk taking. Ed.D. thesis, State University of New York at Albany.

Kahn, R.L. and Cannell, C.F. (1957). The dynamics of interviewing. New York: Wiley International.

Katz, D. (1964). The motivational basis of organizational behaviour. Behavioural Science, 9(2).

Katz, D. and Kahn, R.L. (1966). The social psychology of organizations. New York: John Wiley and Sons.

Keef, J.L. (1976). An investigation to measure the preferred role of teachers in educational decision making in Class 1 Montana school districts. Ed.D. thesis, University of Montana.

Kennedy, W.J. (1973). The relationship of teachers' professional orientation and perceived organizational structure of schools to involvement of teachers in innovative activity. Ed.D. thesis, New York University.

Kokovich, S. Jnr. (1969). A study of the relationship between perceptions of leader behaviour and certain dimensions of teacher morale.. Ph.D. thesis, Ohio University.

Koplyay J.B. (1966). Relationships between teachers' morale, organizational climate, and school salary policies in selected suburban schools. Ph.D. thesis, Northwestern University.

Kunz, D.W. (1973). Leader behaviour of principals and the professional zone of acceptance of teachers. Ed.D. thesis, Rutgers University, the State University of New Jersey.

Lacey, C. (1966). Some sociological concomitants of academic streaming in a grammar school. British Journal of Sociology, 27(3), 245-262.

Lacey, C. (1970). Hightown grammar: the school as a social system. Manchester: Manchester University Press.

Lane, W.R. Corwin, R.G. and Monahan, W.G. (1966). Foundations of educational administration. New York: Macmillan.

Laughlin, R.A. (1973). A study of organizational climate as perceived by faculty in Colorado community junior colleges. Ed.D. thesis, University of Colorado.

Lawrence, P.L. and Lorsch, J.W. (1969). Developing organizations: diagnosis and action. Reading, Mass.: Addison Wesley.

Leatherwood, L.B. (1973). An investigation of factors affecting the morale and needs satisfaction of selected team teachers in North Carolina. Ph.D. thesis, George Peabody College for Teachers.

Lee, Chul Koo (1974). The relationships between organizational climate and performance evaluation of the principals of selected high schools in Mississippi. Ed.D. thesis, Mississippi State University.

Leiman, H.I. (1961). A study of teacher attitudes and morale as related to participation in administration. Ph.D. thesis, New York University.

Leiman, H.I. (1968). A study of teacher morale as related to teacher participation in administration. Study of Morale, 31.

Lichtenfeld, R.V. (1977). A comparison of the effects and determinants of the executive professional leadership of public and independent elementary school principals. Ed.D. thesis, Columbia University Teachers College.

Likert, R. (1958). Effective supervision: an adaptive and relative process. Personal Psychology, 11, 317-332.

Likert, R. (1959). A motivational approach to a modified theory of organization and management. In Haire Mason, ed. Modern organization theory: a symposium of the Foundation for Research on Human Behaviour. New York: John Wiley and Sons.

Likert, R. (1961). New patterns of management. New York: McGraw Hill.

Likert, R. (1967). The human organization: its management and value. New York: McGraw Hill.

Likert, R. (1961). The nature of highly effective groups. In Carver, F.D. and Sergiovanni T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Likert, R. (1970). A major resource to help school systems meet their problems most successfully. Unpublished paper.

Likert, R. (1971). An overview of new patterns of management. In Hollander, E.P. and Hunt, R.G. Current perspectives in social psychology. New York: Oxford University Press.

Likert, R. (1972). The Likert profile of a school: new survey instrument for public schools to improve organizational effectiveness. Ann Arbor, Mich.: Rensis Likert Associates.

Lipham, J.M. (1960). Personal variable of effective administrators. Administrators Notebook, 9, 1-4.

Lipham, J.M. (1973). Leadership, general theory and research. In Cunningham, L.L. and Gephait, W.J. Leadership: the science and art today: the twelfth annual Phi Delta Kappa symposium of educational research, pp.1-15. Itasca, Ill.: F.E. Peacock Publishers, Inc.

Lipham, J.M. (1975). Competency/performance-based administrator education (C/PBAE): recent developments in the U.S. In Hughes M. ed. Administering education: international challenge. London: Athlone Press, University of London.

Lusthaus, C.S. (1974). Role conflict: a study of the school organization. Ph.D. thesis, State University of New York at Buffalo.

Luthans, F. (1973). Organizational behaviour. Tokyo: McGraw Hill Kogakusha.

Lutz, F.W. and Iannacone, L. (1969). Understanding educational organizations: a field study approach. Colombus, Ohio: Charles Merrill Publishing Company.

Lynch, M.R. (1973). An investigation into "progressive" education and the attitudes of "progressive" school teachers. M.Ed. thesis, University of Bath.

Maas, J.M. (1968). A study of the relationship between specified characteristics of teachers and their perceptions of job satisfaction and job dissatisfaction factors. Ph.D. thesis, University of Minnesota.

McEntire, B.A. (1975). A study examining the relationship between the organizational structure and teacher participation in school decision making. Ph.D. thesis, University of South Carolina.

McGregor, D. (1957). The human side of enterprise. In Carver, F.D. and Sergiovanni, T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Mackay, D.A. (1964). An empirical study of bureaucratic dimensions and their relations to other characteristics of school organizations. Ph.D. thesis, University of Alberta.

Mackay, D.A. (1964a). Should schools be bureaucratic. Canadian Administrator, 4.

Mackay, D.A. (1966). Using professional talent in a school organization. In Carver, F.D. and Sergiovanni, T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Mackay, D.A. (1969). Research on bureaucracy in schools: the unfolding of a strategy. Journal of Educational Administration, 7(1).

Mackillican, W.S. (1975). An empirical study of the relationships between school management patterns and change towards classroom openness. Ph.D. thesis, University of Ottawa.

Mackillican, W.S. (1978). The question of leadership: developing an operational definition. Paper presented to Conference of Western Australian Superintendents, January 1978.

McNamara, V.D. and Enns, F. (1966). Directive leadership and staff acceptance of the principal. Canadian Administrator, 6(2).

MacTaggert, D.S. (1971). Job satisfaction and organizational openness as perceived by elementary teachers in a Florida school system. Ed.D. thesis, University of Miami.

March, J.G. and Simons, H.A. (1958). Organizations. New York: John Wiley and Sons.

March, J.G. and Simon, H.A. (1958a). Dysfunctions in organizations. In Carver, F.D. and Sergiovanni, T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Maslow, A.H. (1943). A theory of motivation. Psychological Review, 50, 370-396.

Maslow, A.H. (1954). Motivation and personality. New York: Harper Brothers.

Mawter, P.T. (1975). Teacher professionalism and decision making modes in selected elementary schools as determinants of job satisfaction. Ph.D. thesis, University of Oregon.

Merton, R.K. and Kendall, P.L. (1946). The focussed interview. American Journal of Sociology, 41(6).

Metcalf, H.C. and Urwick, L. (1940). Dynamic organizations: the collected papers of Mary Parker Follet. New York: Harper and Row.

Miles, M.B. ed. Innovation in education. New York: Bureau of Publications, Teachers College, Columbia University.

Miles, M.B. (1965). Planned change and organizational health: figure and ground. In Carver, F.D. and Sergiovanni, T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Miles, M.B. and Schmuck, R.A. (1971). Improving schools through organization development: an overview. In Schmuck, M.B. and Miles, R.A. eds. Organization development in schools. Palo Alto, Calif.: National Press Books.

Miles, R.E. (1964). Conflicting elements in managerial ideologies. Industrial Relations, October 1964, 77-91.

Miles, R.E. (1965). Human relations or human resources? Harvard Business Review, 43(4), 148-163.

Miller, D.E. (1973). A study of relationships between job satisfaction of teachers and their perceptions of bases of social influence of their principals. Ph.D. thesis, Syracuse University.

Mininberg, E.I. (1970). The relationship between decision making and innovative activity: a study of the relationship among teacher perceptions of the locus of decision making, their own participation in decision making, and their own involvement in innovative activity in selected suburban senior high schools. Ph.D. thesis, New York University.

Moeller, R.H. (1962). Bureaucracy and teachers' sense of power. Administrators Notebook, 11, 1-4.

Monks, T.G. (1968). Comprehensive education in England and Wales: a survey of schools and their organization. Slough, Bucks.: National Foundation for Educational Research in England and Wales.

Morris, B.N. (1975). The relationship of teacher perceptions of organizational climate to job satisfaction in the elementary schools of a metropolitan school district. Ed.D. thesis, University of Houston.

Moser, R.N. (1974) A study of the relationships between the perceived organizational environment of secondary schools and teacher morale. Ph.D. thesis, George Peabody College for Teachers.

Murphy, M.P. (1974). An investigation of the relationship between teacher morale and organizational climate in selected high schools. Ed.D. thesis, University of Massachusetts.

Newbold, D.E. (1973). Streaming or mixed ability? - lines of thought. In National Union of Teachers, Secondary Education, 4(1), 3-6.

Newbold, D.E. (1975,1975). Some aspects of the effects of organization in a comprehensive school, with special reference to ability grouping. D.Phil. thesis, University of Oxford.

Newell, T. (1975). Organization development in schools. In Houghton, V., McHugh, R. and Morgan, C. eds. Management in Education - Reader 1. London: Ward Lock Educational in association with Open University Press.

Newson Report (1963). Half our future. H.M. Stationery Office.

Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K. and Bent D.H. (1970). S.P.S.S.: statistical package for the social sciences. New York: McGraw Hill.

Norwood, S.C. (1943). Curriculum and examinations in secondary schools. The Norwood Report. H.M. Stationery Office.

Notheis, J.A. (1975). The relationship between ideal and real behaviour as perceived by secondary school teachers and principals in the state of South Dakota. Ed.D. thesis, University of South Dakota.

Null, E.J. (1965). The relationships between the organizational climate of a school and personal variables of members of the teaching staff. Ph.D. thesis, University of Minnesota.

Null, E.J. (1970). The hierarchy of personal needs: its significance to school principals. Peabody Journal of Education, 47, 347-351.

Oldham, J. (1975). Organizational analysis in education: an empirical study of a school. In Houghton, V., McHugh, R. and Morgan, C. eds. Management in Education - Reader 1. London: Ward Lock Educational in association with Open University Press.

Open University. (1974). Decision making in British education systems. E.221. Unit 2: Central government education. Milton Keynes: Open University Press.

Open University (1976). Management in education series, E321/2. A case study in management: Sidney Stringer School and Community College. Milton Keynes: Open University Press.

Open University. (1976). Management in education series, E321/6. Organizational development, OD: the case of Sheldon High School. Milton Keynes: Open University Press.

Paffenroth, L.A. (1974). The relationship between expressed values of teachers and principals, their involvement in the decision making process and their attitudes toward education. Ph.D. thesis, University of Wisconsin.

Parsons, Talcott. (1937). The structure of social action. New York: McGraw Hill.

Parsons, Talcott. (1956,1957). Suggestions for a sociological approach to the theory of organizations. Administration Science Quarterly, 1, 63-85.

Paul, R.H. (1972). Organizational structure and professional autonomy: a comparative study of teacher authority conflict in Montreal and Outer London. Ph.D. thesis, London Institute of Education.

Pedley, R. (1966). The comprehensive school. Harmondsworth: Penguin Books (revised edition).

Porter, L.W. (1958). Differential self perceptions of management personnel and line workers. Journal of Applied Psychology, 42, 1-5-108.

Porter. L.W. (1959). Self perceptions of first level supervisors compared with upper management personnel and with operative line workers. Journal of Applied Psychology, 43, 183-186.

Porter, L.W. (1961). A study of perceived needs satisfaction in bottom and middle management jobs. Journal of Applied Psychology, 45. 1-10.

Porter, L.W. (1961a). Perceived trait requirements in bottom and middle management. Journal of Applied Psychology, 45, 232-236.

Porter, L.W. (1963). Job attitudes in management: II perceived importance of needs as a function of job level. Journal of Applied Psychology, 47(2), 141-148.

Porter, L.W. (1963a). Job attitudes in management: I perceived deficiencies in need fulfillment as a function of job level. Journal of Applied Psychology, 46(6), 375-384.

Poster, C. (1971). The school and the community. London: Macmillan Education Ltd.

Prieto, A.C. (1975). An investigation of the relationship between participative group management in elementary schools and the needs satisfaction of elementary classroom teachers. Ed.D. thesis, University of New Orleans.

Punch, K.F. (1969). Bureaucratic structure in schools: towards redefinition and measurement. Education Administration Quarterly, 4(2).

Punch, K.F. (1970). Inter-school variation in bureaucratisation. Journal of Educational Administration, 8(2).

Punch, K.F. and Ducharme, D.J. (1972). Life cycle leadership theory: some empirical evidence. Journal of Educational Administration, 10(1).

Redefer, F.L. (1959). Factors that affect teacher morale. Nations Schools, 63, 59-62.

Redefer, F.L. (1964). Studies of teacher morale. School and Society, 92.

Redmond, R.F. (1975). A study of organizational climate of schools and perceptions of students and teachers. Ph.D. thesis, University of Maryland.

Richardson, E. (1973). The teacher, the school and the task of management. London: Heinemann.

Richardson, E. (1975). Authority and organization in the secondary school. Schools Council Publication.

Richardson, R. and Blocker, C. (1963). Note on the application of factor analysis to the study of faculty morale. Journal of Educational Psychology, 54, 208-212.

Richardson, R. and Blocker, C. (1966). An item factorisation of the faculty attitude survey. Journal of Experimental Education, 34, 89-93.

Robinson, N. (1966). A study of the professional role orientation of teachers and principals and their relationship to the bureaucratic characteristics of school organizations. Ph.D. thesis, University of Alberta, Edmonton.

Ross, J.M., Bunton, W.J., Evison, P. and Robertson, T.S. (1972). A critical appraisal of comprehensive education. Slough: National Foundation for Educational Research.

Royal Commission on Local Government in England. (1968). Research studies 6: management and government. The Research Unit on School Management and Government, University of London Institute of Education: H.M. Stationery Office.

Saluzzi, J.J. (1976). Maslow need satisfactions among selected IGE and self-contained elementary school classroom teachers. Ph.D. thesis, University of Missouri-Columbia.

Sargent, J.C. (1967). Organizational climate of high schools. Minneapolis: Educational Research and Development Council of the Twin Cities Metropolitan Area Inc.

Sasse, E.B. (1966). Teacher and administrator participation in decision making and curriculum development. Ph.D. thesis, University of Wisconsin.

Schult, H.E. (1976). Need fulfillment and job satisfaction of principals classified by legal status in New York State. Ed.D. thesis, Fordham University.

Sergiovanni, T.J. (1966). Investigation of factors which affect job satisfaction and job dissatisfaction of teachers. Ed.D. thesis, University of Rochester.

Sergiovanni, T.J. (1967). Factors which affect satisfaction and dissatisfaction of teachers. Journal of Educational Administration, 5(1), 66-82.

Sergiovanni, T.J. (1968). New evidence on teacher morale: a proposal for staff differentiation. North Central Association Quarterly, 42, 259-266.

Sergiovanni, T.J., Metzcus, R. and Burden, L. (1969). Towards a particularistic approach to leadership style. American Educational Research Journal, 6. 62-79.

Sharma, C.L. (1965). Who should make what decisions? Administrators Notebook, 3, 1-4.

Sharma, C.L. (1963a). A comparative study of the processes of making and taking decisions within schools in the United Kingdom and the United States of America. Ph.D. thesis, University of London.

Shaw. C.E. (1975). A comparative anlysis of organizational climate and job satisfaction at selected public and catholic secondary schools in Connecticut. Ph.D. thesis, University of Connecticut.

Shin, J.S. (1975). A study of the relationships among the principal's leadership style, teachers' need-orientation, and the degree of teachers' satisfaction with their principal's job performance. Ed.D. thesis, University of Kentucky.

Sidotti, P. (1976). A study of the elementary principal's use of formal and informal authority as it relates to teacher loyalty, job satisfaction, and sense of powerlessness. Ed.D. thesis, Rutgers University, the State University of New Jersey.

Simon, H.A. (1945). Administrative behaviour. New York: The Free Press, Macmillan.

Slater, R.C. (1969). Organizational climate: an investigation in South Australian state schools. South Australian Teacher, August, 44-51.

Smallridge, R.J. (1972). A study of relationships between the perceived management system of elementary schools and the personal needs satisfaction of teachers. Ph.D. thesis, George Peabody College for Teachers.

Smith, K.R. (1966). A proposed model for the investigation of teacher morale. Journal of Educational Administration, 161, 4(2), and The validation of a morale measuring instrument. Journal of Educational Administration, 10(1).

Smith, K.R. (1976). Morale: a refinement of Stogdill's model. Journal of Educational Administration, 15(1).

Smith, K. (1978). Staff morale and teachers' sense of power. Commonwealth Council for Educational Administration Newsletter, 3, No.3, 2-5, September.

Smith, M.C. (1975). The relationship between the participative management style of elementary school principals as perceived by their teachers and the level of teacher morale. Ed.D. thesis, University of Southern California.

Smith, P.J. (1973). An investigation of the relationships between teacher satisfaction and organizational climate in selected elementary schools. Ed.D. thesis, University of Arkansas.

Snyder, W.C. (1972). Morale as an effect of teachers' perceptions of their role in educational decision making. Ph.D. thesis, University of Pittsburgh.

Sobong, L.C. (1975). A study of the relationship between teachers' beliefs regarding dimensions of academic freedom and their professional and employee role orientations. Ph.D. thesis, New York University.

Sollenne, J.J. (1978). A decision making model utilising Getzels-Guba. National American Society of School Principals Bulletin, 62(414) 36-43.

State School Teachers' Union of Western Australia. (1976). Report of the Committee of Enquiry into the Achievement Certificate. W.A. Teachers' Journal, 66(2) July.

Stewart, D.A. (1976). Changing organizational structure to affect perceived bureaucracy, organizational climate, loyalty, job satisfaction, and effectiveness. Ed.D. thesis, University of Kansas.

Stogdill, R.M. (1959). Individual behaviour and group achievement. In Carver, F.D. and Sergiovanni T.J. eds. (1969). Organizations and human behaviour: focus on schools. New York: McGraw Hill.

Suehr, J.H. (1961). A study of morale in education. Ed.D. thesis, University of Colorado.

Suehr, J.H. (1962). A study of morale in education utilising incomplete sentences. Journal of Educational Research, 56, 75-81.

Taylor, F.W. (1911). The principles of scientific management. New York: Harper and Row.

Terrien, F.W. and Mills, D.L. (1955). The effect of changing size upon the internal structure of organizations. American Sociological Review, 20(1), 11-15.

Thomas, A.R. and Slater, R.C. (1972). The OCDQ: a four factor solution for Australian schools. Journal of Educational Administration, 10(2).

Thomas, A.R., Farquar, R.H. and Taylor, W. eds. (1975). Educational administration in Australia and abroad: analyses and challenges. St. Lucia, Queensland: University of Queensland Press.

Thomas, A.R. (1975a). Changing and improving educational systems and institutions. In Hughes, M. ed. Administering education: international challenge. London: Athlone Press of the University of London.

Thomas. A.R. (1976). The organizational climate of schools. International Review of Education, 22(4).

Thomason, G.F. (1970). Organization and management. In Hughes, M.G. ed. Secondary school administration: a management approach. Oxford: Pergamon Press Inc.

Thompson, D. (1972,1973). An investigation into the effects of certain educational results of a transition from a streamed to an unstreamed form of organization in a large comprehensive school. Ph.D. thesis, University of Leicester.

Toffler, A. (1973). Future shock. p.364. London: Pan Books (paperback edition).

Trast, R.P. (1975). The relationship between the organizational climate of junior high schools and teacher sense of power. Ed.D. thesis, University of Kansas.

Trusty, F.M. and Sergiovanni, T.J. (1966). Perceived need deficiencies of teachers and administrators. Education Administration Quarterly, 11(3), 168-180.

Vroom, U.H. (1958,1959). Some personality determinants of the effects of participation. Ph.D. thesis, University of Michigan. Englewood Cliffs, N.J.: Prentice Hall Inc. (1960).

Vroom, U.H. (1964). Work and motivation. New York: John Wiley and Sons.

Wakeford, J. (1969). The cloistered elite. London: Macmillan.

Wales, R.F. (1971). The elementary principal's leader behaviour and teacher morale. Ed.D. thesis, University of Southern California.

Walker, G.L. (1975). Administrative and other selected factors which may lead to innovation in secondary schools. Ed.D. thesis, University of Southern California.

Walker, J.G. (1975). A study to determine the relationship between leader behaviour and teacher morale in selected elementary schools. Ed.D. thesis, University of Southern California.

Warren, A.McD. (1971). The relationship of level of job satisfaction of elementary school teachers to organizational climate and dogmatism. Ed.D. thesis, Cornell University.

Watts, J. (1977). Participatory government - the place of the head. In Watts, J. ed. The Countesthorpe experience. London: Unwin Education Books.

Weaver, J.W. (1975). The relationship between the organizational climate of secondary schools and selected personality factors of the schools' principals. Ph.D. thesis, Ohio University.

Webb, P.C. (1970). Evaluating operational organization. In Hughes, M.G. ed. Secondary school administration: a management approach. Oxford: Pergamon Press.

Weber, M. (1975). The three types of legitimate rule. In Houghton, V., McHugh, R. and Morgan, C. eds. Management in Education - Reader 1. London: Ward Lock Educational in association with Open University Press.

Weiser, H.E. (1974). A study of the relationship between organizational climate and teacher morale. Ed.D. thesis, University of New Orleans.

Welch, R.J. (1976). The effect of organizational change on administrator job satisfaction, organizational climate and perceived organizational effectiveness. Ed.D. thesis, University of Kansas.

Wells, C. (1976). An investigation of the relationship between faculty involvement in policy formulation and faculty morale. Ed.D. thesis, Virginia Polytechnic Institute and State University.

Wendlandt, G.E. (1970). Faculty involvement in the decision making process and experience in collective negotiations. Ed.D. thesis, University of Wisconsin.

Wermuth, M.A. (1977). Relationship of professional orientation and organizational involvement to organizational commitment. Ed.D. thesis, Columbia University Teachers College.

Whyte, W.F. (1959). An interaction approach to the theory of organizations. In Haire Mason ed. Modern organization theory: a symposium of the Foundation for Research on Human Behaviour. New York: John Wiley and Sons.

Wiggins, T.W. (1968). Leader behaviour characteristics and organizational climate. Ph.D. thesis, Claremont Graduate School and University Centre.

Wiles, K. (1950). Supervision for better schools. Englewood Cliffs, N.J.: Prentice Hall.

Willower, D.J. (1960). Leadership styles and leaders' perception of subordinates. Journal of Educational Sociology, 34, 58-64.

Wolcott, H.F. (1973). The man in the principal's office: an ethnography. New York: Holt Rinehart and Winston.